SPECIAL GODSFIRE ISSUE

GODSFIRE: a prehistory

Producing GODSFIRE

GODSFIRE session narrative

plus...

Stellar Conquest Expanded

An OGRE variant

"G. E. V."

and eight game reviews
WHERE WE'RE GOING

Some words of explanation are in order for this issue. GODSFIRE, our largest game to date, is a huge success. For this reason we have included three GODSFIRE articles and beefed up this issue to a total of 48 pages. There are three months listed on the table of contents but the whole number keeps everyone's subscription straight. No one loses and we catch up the one month we wanted. The next issue will be out in the usual two months. The next issue will be a MicroGame issue featuring an introductory article on MELEE with some variant articles and other goodies.

The book column will be back next issue, it was bumped for space this issue. Briefly, look for THE EARTH WIND & FIRE article by Brian Daley if you like fantasy adventure. Get THE MALACIA TAPESTRY by Brian Aldiss if you like fantasy as literature. If you must read THE SWORDS OF SHANNARA by Terry Brooks wait for the $1.25 paperback. The excellent Hildebrandt & Glamorous art is sure to be available in a calendar soon.

WORK IN progress; MELEE will be ready for shipping a week or two after you get this issue. WARPWAR is MicroGame #4 as a two player ship combat game. You build ship and bases and fight them in a diceless CRT. Movement is on a hex grid of stars with some stars connected by warplines for instantaneous movement. Also in the micro mill but not yet sequenced are EREMION, OGRE II, CHITIN II, a multi-player time combat game, an unnamed robot war game, and a mandron ground combat game.

Large games working are LABYRINTH and HYMENOPTERA. Labyrinth is our fantasy role playing biggie. HYMENOPTERA, well I'm still not satisfied with it. A strategic game at the tactical level was a conceptual mistake. A strategic game with 3,000+ counters is wrong when each player needs only 20-30 units on the map at a time. The final version will be a pure strategic game. Other games in the series will carry the specific unit and tactical detail. The goal now is to sell a $10 game that six can play in four to six hours. It's been a long wait but it'll be right when you get it. The format of Where We're Going will likely change next issue. It will be devoted more to a question and answer format, like the last of this column.

PATRON SUBSCRIBERS should note that their payments are going into a special fund. It will go for a game project we wouldn't otherwise be able to do rather than for phone bills and paper clips. Those who've asked for a payment plan the the pain of a $100 chunk will be pleased to note that we will now accept $25 a month for four months. Your Patron subscription will start after you have accumulated the whole $100 payment.

Thanks to all those readers who sent us the names of stores who sell games in their area. We work and have several new outlets. Stores listen to their customers and will carry what they ask for. The micros are the best bet. Our only retailer complaint is keeping them in stock. TOO MUCH material on our own games is a frequent complaint. We print the best of what we get. Most of it is on our stuff. If you want other games covered then send us something on your favorite game. We prefer more variety but we won't put poorly written material in just for balance.

BACK ISSUES are going fast. All of 1, 2, 3, and 4 are gone. Ten is in very short supply and nine won't be available for long either. Issues 5, 6, 7, 8, and 11 are in good supply. COMING NEXT issues are going in a hurry. We're working on some ideas in this area but won't have anything to show for months. OGRE and MELEE are fair bets for solitaire play if you're willing to devise your own scenarios.

CLUB DISCOUNTS have been seen for but won't be available soon. We already have our TSG discounts. The problem is that we can't give any larger discount on games of other publishers and don't want to have a special additional discount on just our products. We are trying to work something out.

FREE TSG sample is no longer being sent out. You'll have to pay cash money now, even with information requests.

WHY DON'T you do a game on (book, comic movie, etc.) is often asked. Getting rights for a game to copy material is an effort. Then there's the extra work of designing to an existing format. We'd rather do games on our own themes. It's more fun, easier, and gives better games.
This game had three parents. First, the interesting times of the last fifteen years provoked me to read much history and sociology. Secondly, Metagaming Concepts promised to be an informal and sympathetic publisher which paid money. Finally, being a lifelong reader of science fiction, my opinions were well-formed, and I saw no SF game (not even Stellar Conquest or StarForce, to name my Favorites) which did quite what I wanted.

I began thinking about the game in February, 1976. By April, I thought it was complete, and in May Howard Thompson said he thought it too. The contract was signed in August; play-testing started in September. Since I live in San Francisco, collaboration was not attempted. The mechanics of the original were improved in many ways, and the elegantly detailed Combat rules should have a "Built in Austin" label. The result is clean (I've found but two rough spots in my copy) and smooth-playing. The game is, I think, a remarkably clear simulation of complex events. The responsibility for this gracefulness belongs to the other people

in the credits: Steve Jackson in particular, Howard Thompson, Elton Fewell, Robert Taylor, Susan Tunnell, and the obviously crackerjack Tabletop Generals.

I had designed a previous game, done as a gift for a friend. Putatively a space game, it more resembled an eastfront armor game, but the experience made me respect writing rules. I therefore had an idea of what I was getting into when I began what was originally titled Wars of the Narm.

The development went fairly smoothly, mostly because of a comprehensive shopping list. I wanted the following: 1) limited or negligible stacking of counters; 2) low unit differentiation; 3) a simple 3-D movement system; 4) simultaneity or the effect of simultaneity; 5) an easily learned basic game amenable to solitaire play; 6) a dramatic and reasonable game universe which definitely related to play; 7) a socio-political module which inter-related Revenue, Party, Popular Approval, and International Input; 8) a module which would not displace anything learned in the basic game; and 9) characterized governmental systems which could be
tried out under differing conditions. Alas, I couldn’t get 9 to work, though I may someday be able to retrieve it.

Implicit in this was a feeling of wanting an ethical game. I wanted the player to feel no special relationship to their hypothetical populace, to at least feel a little fearful at what that populace could do. Whether a place of people is not a future I find entertaining. These imaginary beings do not exist to bollix Master Plans, though I think that they are the medium through which players duel with uncertainty. It is behavior in which to act kindly, even with dreams.

Having said so, someone is now wondering why I destroyed a star cluster to provide a game rationale. Such a question leads me to the consideration of the first item on my shopping list. I detest something more than one counter on a hex. I know that there is need for raising little layered monoliths maps and that stacking is logical and design-efficient, and that, tactically, stacking hides weakness and strength in a shell of thought's thoughts or divisions instead of peas. No matter. I hate stacking. I cannot remember what’s under which, even if I have a chart left since I may have lost it last turn while I was trying to find my there. If I fan out a map underneath, my cairn crumbles across the board while my opponent shrieks, ‘That’s a move! That’s a move!’

Godfire lessens such trauma. PDF/AG operations benefit from the large system sheet areas; SQD augment acts as a carrot and consolation prize for stacking freaks.

In considering stacking, a cautionary tale suggested itself to me of what would happen if someone dared overstack: the Cluster-Buster born! Continuing with this problem, I had a thought. Concentration would occur, and where, in a very empty universe, such forces would be directed. Obviously, as in Stellar Conquest, in the heart of an open cluster, where hypothetically, tightly packed and productive shall our maulers like honey draws flies. I added faster-than-light voice/picture communication so that insult could flow freely. This seemed a logical and consistent arena for conflict, and it provided the outline of the game's rationale. The Godfire disaster also explains, beyond simple decency, why the rules do not permit planetary decimation.

Since I will have two-tiered and complex in total, I wanted low unit differentiation. No player should be forced to juggle parts of balance, and forty-one peculiarly valued combat units. Further, since the game would be played out of an attempt that Metagaming would enjoy producing a game with 6000 counters. As published, the unit properties are impressive, producing party's policies, and that's the way it should be.

Continuing down the shopping list, I discover a simple movement system exists. Determined not to use notation, which is a pain and sheer chaos if you own more than a dozen units, I finally settled for the present system, which is nothing more than the right cells being flown by the chits are printed on the map. Howard T. calls this a graphic marker system, and I think that's clear enough. As I write, Godfire is the only game I know of which uses such a simple system. The simplest system going if a lot of counters need maneuvering.

The obvious drawbacks are that arranging all those levels like a spiral staircase takes room, and that drawing them makes you blind. Then may be the simple solution to provide adequate maneuver room, thus raising the price of the game. The full map provides 2112 cells for movement, almost exactly the number of spaces contained by an SPI 34x22 5/8 hexsheet. In terms of production, graphic markerism is a step backward, cutting efficiency in half.

In terms of decision time during play, the Godfire system is much more efficient than notation, by a factor of two or three, and increasing drastically when the number of players increases. Since there are two counters for a height chit display, and one has to be changed with each altitude change, this system also allows you immediately find the last "7" in the counter mix.

A more serious drawback may be that the map is tactically tight-a unit cannot be farther than four cells from one of the sides. This is not a "vast three-dimensional sea," as the words from StarForce go, but neither is it a "small, flat lake." My first conception was of a viewpoint, and I (at first) drew it that way. That might have been a good idea to keep.

(All names on the strategic map were from the Times atlas; some were altered to a playblind-draw rule since discarded. I regret shortening them; bi-syllabism gets dull. Nessan came from an extinct Siberian province.)

Movement allowances were kept low, to keep units from bouncing off the board. Anyative sys- tem was intended to discourage attempts to build lines and to pro- vide a feel of reality. The idea was extended to testing the rules in a few more confused and second- guessing. As it stands, this is one of the best features of the game. Most F&S games get terrible solitaire play ratings (Dungeon & Dragons gets a 2 on an 0-9 scale; Stellar Conquest rates a 3). The basic game was kept simple in order to improve upon this.

The basic game was intended to be concerned with surface movement, with skin and kicks and punches. The advanced game is about the ner- ves, production, campaigns, and the like. I tried to arrange a balance of forces so that the system is loose and the player remains the brains. The tables are completely random, and nothing happens unexpectedly. There is room for maneuver and repair. While some procedures are automatic, I think the rules success are characterized them, and I do not think the player is left with a feeling of arbitrary design. Some implicit behind the design were not stated, however. Here they are: 1) governments de- cid the basis of consensus. Totalitarian governments differ with democracies in the numerical balance of the consensus. But not always. 2) All initial viewpoints are correct; given the conditions in which they evolved. All polit- ical viewpoints are therefore ana- chronistic. 3) There is no left wing and a right wing—if not substantively, then concerning technique. 4) Getting something for nothing yields more status than getting something for something. 5) Mass government is a matter of effect. 6) Money talks.

The design of the advanced game went very smoothly, and there is little new here, except the idea of linking defense policy to political party. Though it happens in the real world all the time, I confess I was somewhat surprised to find a simple way to do it on paper.

Given a universe in which "subversion" occurs, it became imperative to scale the scales to represent socio-economic factors, rather than private record sheets. I tried some other arrangement (and not simple counters). First, this discourages cheating (you don't do this, I know, but I do as I can and want to be free from temptation). Second, the scales record such gross parameters that they cannot be confused, or secreted away on the planet status, any competent social sciences grad student would be able to stuff out approximate values in about an hour. The scales represent the absolute minimum you need to know.

I should mention that subver- sion sounds naughtier than it might. Gigabauc are a quantification of human effort, so it would be legitimate to call this subver- sion not just as arms or bribes, but as the spread of social ideas, of political smugness, or whatever template the player uses to intertwine with fate.

The advanced game is homolous to recognized contemporary problems as terrorism, economic development and resistance to it, multi-level international aggression, rebellions, friction, and rebellion and subversion, spending and inflation, "directing" governments, etc. Alas, the real world is so delicately balanced that I could not introduce an inconvenience in the game world is total disaster here on Old Earth. That, I submit, is a second thought.

In correspondence, Ben Ostrander suggested this article be on the influences behind the overall game concept. I couldn't do a whole piece on it: Vietnam? Student activism? Student quellism? Watergate? Black militancy? Chicano militancy? Female anti-incest debates? Ben did mention books, and there are books, of course. If you want to write your own article about what influenced me, here's some raw material.


Non-Fiction: Michaels, Politi-
Godsfire underlines basic political relationships and capabilities in a simple fashion. It is not snobbishly detailed, but it can force you to evaluate common activities, both while playing it and when you emerge, binary-eyed, in a place very far from the Narym and the purple glare of Godsfire.

If at that time you have Godsfire rule questions, I would be glad to answer them by mail. My address if 12 Perine Pl., San Francisco CA 94115. I can't help with "best move" problems, since I don't know the answers. You'll have to decide that yourself, and then write an article about it for TSG.

On the whole, I'm pleased with the game. Development and playtesting kept intact as much of the original design as I could desire.

It was late September, more or less of 1976. I was sitting around the Metagaming office, trying to recover from two months of working on Monsters. Monsters. I still twitched every time I mentioned it. God, I'd like to keep the "gold piece." And why was Howard grinning like that?

"Okay, Steve, wake up," he said, or something equally cheerful and sausine. "I've got a reward for you. For doing such a good job on MM, you get to work on a new one." From atop a filing cabinet, he pulled a bulging cardboard envelope labeled Wars of the Narym, and extracted a thick sheaf of yellow paper.

I leafed through it. Forty pages, give or take. I twitched. Howard was still emptying the envelope. Several bags of counters (about a million). A bunch of sheets covered with geometrical designs. Three combat results tables. Two enormous maps covered with purple-and-yellow hexes and black squares. I screamed and dived under the table.

Three days later, I woke up at home. The envelope was sitting on the table. Shaking my head, I began reading the rules.

Three hours later, I was muttering to myself and moving counters around.

Six hours after that, I was a foot deep in notes, sketches, empty Coke bottles, and other garbage.

Next day, I got Howard on the phone. (Not a mean feat, if you've never tried.) "Hey...you know this Narym thing? It's got possibilities."

That was how it started at this end. Actually, the biggest change we made was the name — from Wars of the Narym to Godsfire (after the purple hyperuran that appears to fry you when you exceed stacking limits.) The rest was just debugging — making an already good game better.

Two things became obvious. First, we were dealing with the best combined political/military simulation game we'd ever seen. Second, it was so long and involved that the average players would have trouble finishing a game due to sheer lack of time. After all, running a real war is a full-time job for a whole nation. Lynn's game simulated that a bit too well. So our efforts went toward simplifying the accounting while retaining the basic complexity. This wasn't supposed to be a simple game — but it needed to be finishable.

After some playtesting, it began to work a little better. Lynn's original two movement phases per turn were cut to one, and the initiative system (a truly great idea) was simplified somewhat. One of the original three CRTs was eliminated, and the combat abilities of the three unit types were changed somewhat to make them more nearly equivalent in value.

The most annoying problem with the whole game was the distance factor. Lynn was in California; we were in Austin. When we didn't understand something, we couldn't just call him and ask. On the other hand, we couldn't just throw it out and rewrite without understanding; the game was too intricately woven for that. So, every so often, something would come up to force us to beat our heads against the wall, hoping for enlightenment. Sometimes it came.

This eventually made for a better game, just because the "hard parts" were so much mulled over...and it made me very conscious of the need to make sure rules were unambiguous and to provide examples. But, at the time, it was sometimes irritating. That is the reason we swore off games from "outside" designers (although if and when something as good as Godsfire comes...
Playtesting Godsfire was interesting, just because the game was so long and complex. It certainly taught us a lot about the frustrations inherent in the game; some we removed, some we gleefully left. There were times when, without ever contacting an enemy, a player would find his economy collapsing and his systems in revolt. (We left this in.) In one game, Robert Taylor spent literally hours trying to conquer a small neutral system which "play would itself," had not brought quite enough force; it kept shooting up his SQDs and AGs without taking enough attention to matter. We made the neutrals a little weaker after that...but not much. Expansion isn't easy.

The first session when Howard, Susan Tunnell, and I were sitting around with the rules and a bottle of wine. We felt like playtesting, but there were no short 3-player scenarios.

"OK, The heck with it. Here. You take Chula, I'll take Grom, Susan has Hauch, and we'll fight over Vand. Pour me some more.

"Great, What has Vand got?"

"Women." Susan hit me.

Oddly enough, it played well, so that genre (with a somewhat different background) became Scenario Two.

Once we were satisfied with the rules, the next step was the graphics. And that was another real kick. I've always thought that the physical quality of a game is important. Not just that it's readable, and won't fall apart after you play it twice - but that the physical components add to the "feel" of the game, and help you get into the proper frame of mind. Godsfire is a big game, with lots of components, which meant a lot of work, but all the more opportunity to get people thinking as though they lived in that future universe. In fact, it starts as soon as you pick up the game and look at the cover.

We gave the basic idea to two artists, a stadium where a political rally or debate has degenerated into a riot. We chose Elrohir's because it was exactly what we wanted to tie both halves of the game together. The perspective is perfect...in the foreground you see then there was the session working each other over, while the politicians scream at each other on their podium...and, overhead, the big viewtank shows the ships moving in. I only wish the game cover hadn't come out looking a little more like the original; Elrohir used some fluorescent tones that the camera didn't pick up.

The other version of the cover - the one we didn't use on the game - is on the cover of this magazine.

The cover is the most impressive thing about the booklet; the interior graphics were drawn from the counters. I had quite a bit of fun on those counters. I wanted designs that would be readable, and different enough that no one counter would be mistaken for another - but pretty. After all, if you're going to command an interstellar empire's ships and men, your counters ought to look like ships and men.

I ended up with a ship design for the SQD, and a jet for the AG, appearing 1, 2, and 3 times on the 1-, 2-, and 3-unit counters. For the PFDs, I had my choice between men, rockets, big guns, or "ray units" - so I used all four on the different-denomination units.

Probably the most work went into the two big sheets that cut apart into system NG and data sheets. Playtesting quickly showed us that the system and NG sheets had to be small. The ones in your game look much like Lynn's originals; they've just been redesigned and shrunk, so you can put a half-dozen in front of you at once. Actually, I think that next time we do a game this big, we'll go back to tally marks on a small sheet, rather than having the players move indicators. Not as neat-looking, but easier to fit on a table.

One other touch was the individualized system and NG sheets. Originally, all the system sheets were to look alike, but then it turned out that we could afford to do two different big sheets - which meant that each individual master could include planet and national-government designations. So I went crazy on them. Each system sheet now includes the name of the planet, and a map.

Ah, yes. The maps. Lynn's original was a six-sided die, around a central circle for ground movement, but it was blank. It seemed natural to make it into a map - so one night, working alone over the light table, I started work. And that was a trip. Have you ever created sixteen worlds?

The national government sheets don't have names (there are too many different scenarios), but each one does have its own symbol, and each symbol matches the NG counter for one set of units. A nice touch, I modestly admit.

Then there are the Data Sheets. These were included because, in this game even more than most, you need reference copies of the CRts, sequences, etc. In spite of everything, Godsfire is a long, complicated game; we did everything we could to let it move faster. On the whole, I'd say we succeeded; I'm happy with Godsfire, and I think Lynn Willis has reason to be inordinately proud. The early scenarios are fine for two-to-three-player, two-to-three-hour games, but the real fun comes when you round a whole group of worthy opponents and spend the whole day playing. (Elsewhere在这TSG, Robert Taylor describes one such marathon.)

I hope gamers have half as much fun playing Godsfire as we had in getting it to press. If you do, I'll be quite satisfied.
On a drizzly Saturday night in February Howard Townsend, Steve Jackson, and myself met at Ben Ostrzykdr's house for our first session of GODSFIRE. Ben had a table large enough to accommodate the entire map, so his place was a natural venue. Initial setup was done by half-hour. Those playing for the first time would require more time.

We played scenario ten with each of us having two systems at the start of the game. Steve's systems were Assab and Zia, Moros and Dasar formed Howard's systems, Ben chose Weribe and Huacho, and my systems were Vandr and Grom.

My general strategy at the beginning of the game was based on the positions each player held around the map board, and on their abilities as gamers. With almost the length of the map separating Howard and myself, I felt comfortable knowing he would have to go through Ben or Steve to get to me. Howard, a "build-er type" in STELLAR CONQUEST, is a formidable opponent. He starts slow, usually waiting until he has a strong base before moving against an opponent, but once he gets rolling he is almost impossible to stop. Ben was closest to me, but Ben is rather new to gaming, and while his strategies are sound his tactics are usually weak. Ben made an inviting target, but to move against him would expose me to my biggest threat—Steve. Like Howard, Steve is a tough opponent. He plays a very detailed game, and he always surprises me with his unorthodox style. I knew I would have to watch him closely and counter every move.

My strategy was to play a defensive game, and wait for an opportunity to present itself, rather than hoping my "strategy" would take the form of a mistake by Steve, things didn't turn out that way. In fact, my strategy seemed to work around turn two, but into the fray after a short pause for the uninitiated.

GODSFIRE is similar to STELLAR CONQUEST, but one of the major differences (among many) is the social interphase. Unlike SC, where if you want attack ships or escorts you simply try them in GODSFIRE, the type of military units you purchase is determined by the political party in power and whether the region is industrialized.

Industriaiizing a region is a difficult task; placing the correct party in power and maintaining it is also hard to achieve. But without a balanced mixture of political parties, and therefore, a balance of military units, your actions and strategies will be limited.

Of course, this juggling act can be made more difficult by your opponents slipping money into your system and attempting to subvert your political parties, and there is always the danger of revolt (nasty things) which will usually require military muscle to quell.

And so it goes. As seen, GODSFIRE requires your strategic concepts to be framed within your political structures. Generally, victory will belong to the player that has the best political setup combined with a good overall strategy with the usual adherence to tactics and timing.

Howard, the old master, proved this point quite well during the game.

Turn-1 My initial political situation is good. I'm top heavy with moderate political parties, but I should be able to industrialize quickly. Howard surprises me and Steve. He has sent 3 SQDs toward Zia, while Steve has shifted most of his forces to Pirr. I position the bulk of my ships around Grom. Ben has set up a simple screen of ships around both his board, and Steve to a nearly flawless setup. T-2 Howard's 3 SQDs continue toward Zia. Steve doesn't consider them much of a threat since he moves more of his forces to Pirr. I move almost all my ships into a tight defensive position around Grom. I think Steve is trying to draw me out. Ben is shifting money from Weribe to Huacho. His forces are still screening his systems.

T-3 Howard and Steve fight a small battle between Assab and Zia. Howard overplayed his hand, and Steve destroyed 3 of only 2 AGs. I resist the temptation to attack Steve, and wait to see if he will pursue Howard. Ben is still sending money to Huacho, and he has moved his ships into a wider screen around his systems.

T-4 Steve pursues Howard. Instead he resumes his stationing of forces around Pirr. Howard has backed off his plans seems to be getting his forces together and settling for a longer attack on Steve. Ben's ships maintain their positions, and I follow my example.

T-5 Every time ships have sprung up on all the systems. Steve sends more of his forces to Pirr. Is he seriously going to attack Pirr, and attempt a pacific victory? Ben has quiet screening his systems, and is maneuvering some ships toward Vand. Now I must balance my forces between Steve and Ben. Howard appears to be taking an interest in Soont.

T-6 Political situation is very good. I was able to change the party in one of my industrialized regions from moderate to extremist. Now I can build a new base beginning to vector his forces toward Soont. It appears he is duplicating Steve's action around Pirr. Ben has made some minor moves toward Pirr, but I'll force him to attack early with a small thrust toward Huacho.

T-7 Steve also starts to feel threatened by Howard's forces around Soont. I believe Steve is about to abandon his attack on Pirr, and concentrate on Howard. But, Ben himself is also exposed to any movement by Ben, but Ben continues to maneuver toward me. I'll attack him between Huacho and Tufan, and destroy his force of 3 SQDs and lose one of my own. Ben has the best political makeup, and he's making full use of it! My political situation is static, which is good, but I need a reactionary political party so that I can build PDs.

T-8 Howard has positioned his forces quite well. He can attack either AG, but I can't build PDs, nor can Steve. I lose one of my AGs, and destroy two more of his SQDs. I would like to back off from Ben, but Steve might join forces against Howard. Another option would be to attack Steve at Pirr, and see if Howard would also attack Pirr. If so, I need change my political setup, but I'm under so much pressure that to do so would be risky. Maybe next turn...

T-9 Steve and Howard continue to dance around Soont, but Steve is again concentrating forces at Pirr. Ben disengages at Tufan, and I'm happy to see him go. I need the time to work on my political situation. I have the feeling it's about to hit the fan.

T-10 Surprise. Howard attacks Steve at Zia. A beautiful stroke by the political leader. It seems Howard's Government flees with the treasury to Assab. Ben and Howard form an alliance, a decision to come to the aid of Steve, and dispatch my main fleet to Zia. I leave a thin screen of AGs around Vand and Grom.

T-11 Howard is wreaking havoc on Zia. He will probably reduce Zia to subsistence level if Steve doesn't recapture it soon. Steve's 3 AGs have penetrated to Moros, and are able to destroy one of Howard's AGs. My fleet and Steve's Pirr force arrive at Zia. Steve loses 3 AGs near Assab, and one SQD of Howard's SQDs. Together, Steve and I wipe out 3 SQDs and 2 AGs of Howard's and prepare for a final showdown.

Their timing is excellent and his forces outnumber mine by 1 to 1, but he leaves many of his ships exposed. When Steve beams his message, I was able to outmaneuver Ben, and I hit his exposed units with good odds, but the dice failed me. Ben loses 2 ships, and destroyed 2 AGs of mine.

T-12 Howard retreats from Zia. He is still on the offensive, but he still has the initiative. The battle has moved to Assab. Smash. Howard is tricky. He suckered in Ben's forces near Assab, and moved his two AGs just off Howard's coast. Ben's fleet has surrounded Vand. Again he leaves several units exposed. I move my SQDs to my AGs. I expect both Ben and Howard to lose units at odds. Once again, I lose 2 SQDs and 2 AGs while Ben loses nothing. I'm being whistled away.

T-13 Howard is able to return his NG to Zia, and begins to restore the economic level of the region. Howard is holding his ground around Assab, and he and Steve are locked in a close fight. Their losses are equal: 1 SQD and 1 AG each. Steve's 3 AGs no longer pose a threat. More importantly, Howard's home force, and destroy another AG of
Howard's. Ben tightens his grip around Vand. My main fleet is coming to the rescue, and I should be able to drive Ben off, but my losses are high. I destroy one AG of his, while he wastes 2 SQDs and 1 AG of mine. Sigh.

At this point with our supply of munchies and cola depleted, the clock edging past 2 AM (I told you guys, we got to start at 8 AM not 8 PM), and our eyeballs red and swollen, we stopped. Exhaustion was the victor.

Actually the consensus was that Howard enjoyed the best position when we called a halt to the game. Steve would have to rebuild Zia before he could launch an attack toward Howard's territory. Ben and I were stalemated with Ben holding a definite advantage. So Howard could pull back and attack a neutral system with a high degree of success, and therefore achieve the necessary conditions for a pacifist victory. Of course, he could have always pressed the attack against Steve, and also had a high degree of success since he was outproducing Steve by 2 to 1 in military units.

And although Howard never produced any PQDs, he never lacked for them. He bought them from Ben. Howard reads the rules, and under the heading Diplomacy he found what he needed. We decided it was within the rules to buy them from another player as long as the amount spent off-system was balanced by the amount spent on-system. If not, the allegiance index of all the regions on all the buying player's systems would drop for each G3 difference.

In hindsight, I should have attacked Steve from the beginning, while Steve would have been better off attacking Soont, and guarding against Howard. Ben played good strategy, but he should have moved against Howard when Howard hit Zia. As for Howard, it's hard to find fault with a winner, but once Steve committed the major part of his ships to Pirr, Howard would have had an easy time with Ben.

At any rate, the game was well played and enjoyable, and in gaming that's what really counts.

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**FEATURES**

**CHITIN: I**

**THE HARVEST WARS**

*by Howard Thompson*

Kkha-nu-Zlek's Spyder mount chittered beneath him restlessly from the pre-dawn chill. Kkha thrummed peaceful thoughts to the Spyder and other nearby shapes in harmony with his brood meld brethren. Full concentration was necessary to keep the force moving. Brutish warriors loved the warmth of hive far more than the cold of an early fall morn. The sun would have been well up before the hulking Gantuas and feisty Phlanx thrusters would have moved on their own. Strident urgency harried the Zlek meld's harmony. Hive food stores were low from the large population.

The Zlek meld had been trained as a command team even before hatching from their cocoons. Kkha had been attuned to Zlek as a replacement this season. Zlek team was four seasons old and one of the more successful combat command melds available to the hive mothers. Kkha was part of a novel attempt to replace meld loses instead of vatting meld survivors when their numbers sank too low for effective melding. Kkha was less Hymenopteran and more an individual than usual, being added to an existing meld of Basics. His usual training would have been as part of a new meld from the time he was larvae.

The mind linked Zlek meld urged their warrior ranks forward at maximum speed. They had been moving eight days, over farther from the closeness of the hive mothers. In the small valley ahead, the huge Vlaros plants with their sprawling root structures would be ready for fruiting today or tomorrow. The Vlaros would be ready for harvest but only fighting would win it. Mentations of enemy command melds whispered even now in the Zlek mental net. Other Termagants and Low Render warriors waited ahead in the irritable cold. Other workers sensed the ripened Vlaros pods and longed to drag them back to the basking musk of the hive mothers.

Kkha wanted Vlaros and bodies to please, warming from the mothers, too. Winter would be stark without a maximum harvest success given this year's bad weather. Kkha wanted food, wanted to kill hated enemy warriors, and wanted the love and growth of the mother's hive. Kkha wanted nothing for himself. Himself was an alien concept despite his unusual melding. Self meant nothing to Kkha, even when he acted independently. The hive was all and the Zlek team was his only life pride. Yet, even the pride of meld wasn't his but alls.

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To say that Men and insects differ seems as obvious as stating that right follows days. To gain a real feel of what that difference would mean as an experience is difficult. Men are individuals who are never sure that their perception and experience of existence is at all similar to that of any other men. We will never know what a society of sentient insects will be like to its non-individual members. They probably don't have anything like a personal, individual sense of themselves. We can speculate for fun and knowledge and learn by observation.

Hymenoptera, like Stellar Conquest, is based in a game that was developed years ago for personal amusement. Since it was done for fun
and at an age when heavy thinking wasn't important not much thought was given to the hows and whys of those insect societies. They had space ships, individual personalities, and 'human type' drive and motivation. That blithe approach is certainly idiotic. Those Hymenopterans were created, and now revised, with the expectation that bugs could do anything humans can do, but differently. Chitin I is a tactical abstract from the to-be-published game Hymenoptera and reflects the physiology and psychology of Hymenopterans.

Hymenopterans have fair infrared vision but poor sight in the human optical range. They see fairly well close up in sunlight and passably well in the dark. They see detail poorly and at a distance not at all. The Hymenopteran sense of smell far surpasses men's. A third level Tek Tek only need smell a complex substance and taste it to have a good idea of the chemical structure. Their hearing extends a bit below the human low and higher than that of dogs. This combination of acute hearing and smell lets Hymenopterans a different perception of objects than man. Their experience of objects is more sensual, more organically than man's. To man objects are solid, more visually separate from our person. Hymenopterans see their world less but experience it with far more detail of sensation. This sensing difference is accentuated by relatively poorer physical co-ordination and dexterity. Clumsy handling of artifacts gives them a view of objects as something to be sensed and experienced rather than as something to be used and manipulated.

So far Hymenopterans sound sort of semi-human. Psychologically the difference is vast. Hymenopterans don't have clear individual identities. A personal ego is not possible for a race that never truly recognizes or even tries to separate them from the hive membership. They don't learn 'object' relationships as much as humans do. Their minds are not as manipulators. We are object-oriented to our world. We manipulate and control our environment through the perception of objects. Hymenopterans think of objects less as something to be used and more as something to be experienced and identified. They use tools sparingly and with poor efficiency. They don't have missile weapons in war. Poor vision, co-ordination and object sense never gave rise to the concept of throwing an object. Thrown objects meant to intersect the course of another moving object will be a distinct surprise for the first Hymenopterans to encounter humans. They will, of course, develop missile weapons to their own advantage from an entirely different approach and viewpoint.

Hymenopteran will have a few surprises for man, too. With their telekinetic capacity, arising from enhanced brain function for sense of smell and hearing, we're in for our share of close encounters. Their small ESP energy output will be sufficient for much mayhem, just as it was sufficient for the development of a biotechnological civilization. And this same ESP ability eventually gave them control of all organic life on the hive planet Cheleka.

Man will learn that long term Hymenopteran captives are no longer human. We will also learn that captured pregnant women become horrors. They also become the instrument for the first successful breeding of humans with aliens, though you'd never, ever want to meet one.

***

Scent of ripened Vlaros wafted up the mists as Eloina's first warm rays pierced to the valley floor. A thrilling eagerness went through the mind net of Khha's meld. The march had been made in time! Vlaros would be to their's, if they fought well for the hive mothers. Rasping trills began from the workers as they too smelled Vlaros and began to press more rapidly forward. Hold! Hold! went mentally speeding out to the workers from the command meld. Wait! Wait! till warriors crush the thorax chitin of hated enemy soldiers! Wait! Wait! till the way is clear to the Vlaros mound-stalks.

Workers waste service with useless deaths. Living to present Vlaros to our worshipped hive mothers is ultimate. Wait! Wait, dumb, eager little brothers.

With the sun up and Vlaros ready the battle develops swiftly. Zlek meld sends a swift Tergantag skirmishers to center and right to hold and cover the Vlaros stalks. The center of the valley has some low hills and heavy undergrowth where several small streams join. Low Renders moving to the center in support. Flyer Plunges will soon awaken from their warm nights nesting, to come diving to the fray. If Basics know any fear it is of flyers swooping down to kill them as battle-field controllers.

Musky odors of the enemy are now maddeningly evident. Mind-chitterings of the enemy command meld whisper, if strangely, in Khha's mind. Forward! Forward, urge the Basics to their killing charges. Despite lingering chill the warriors now need little spur to move. The violent warriors now need control to avoid frothing, berserk, killing lusts that shatter any cunning battle
order. On the right, where Kkha approaches, Termagants clash with Zlek and the 2Zek force retreats from the Virosa stalk to regroup. Hold! Hold, Kkha's meld link cries. Battle swirls on the left and is soon to join in the center. Kkha feels 2Zek Termagants readying a new counter thrust in front of him. Not yet! Wait! Wait until...now.

Even the poor eyes of Kkha's group can now see the huge, central stalks of Virosa. Enemy Termagants are sensed waiting, but no enemy workers are yet in the Virosa. Hold again! meld brothers, Kkha calls, to our left come Gantuower smashers.

Kkha's sensings are true. Coming from the center to the left of his group are a full three mandibles of enemy Gantuows in thudding, humming charge at the regrouped 2Zek Termagants. 2Zek Phlanxes with Kkha require concentrations holding as the small 2Zek Termagants are pounded to jelly and scattered by the enemy Gantuows.

Soon the huge Gantuows stand exhaused from their fearsome rush. The 2Zek Phlanxes are only now released in a furious counter-charge of their own. Slowed only by the stream to their front Kkha's Phlanxes surge forward in a wall of deadly, weighty spikes. The Gantuows barely have time to face the charge head-on.

The wall of Phlanx points stabs deep into the confused, tired Gantuows. Huge bodies are speared, thorax es ripped, legs severed. The Phlanx charge drives them home to break the enemy Gantuows.

Already counting the victory of the charge 2Zek workers move in toward the Virosa. The surviving 2Zek Termagant mandibles move in with them as a screen. A detached group of Phlanxes moves in support of the Termagants and straining workers. Surviving enemy Termagants hold briefly then pull back to make a line with the enemy Gantuow remnant.

Above! Above! shrieks a warning in Kkha's brain!

But, it is too late. Enemy Plunges are already swooping down in attack on Kkha and others of his command sub-nested. 2Zek Basics fall at the bite. They were left exposed by the Phlanx charge and pay for the lapse with their lives. Command control of the 2Zek force on the left is briefly endangered until the humming wings of 2Zek Plunges enter the struggle. The airborne attack is short and gory but enemies are repulsed.

The victory-high Kkha felt from the Phlanx charge fades. The Plunge's surprise assault on the 2Zek command has provided the others with regrouping time. Some hive workers have been killed trying to approach the Virosa. Enemy hive workers have also appeared. The hope for a quick grab of the Virosa has now dissolved into a desperate, bloody brawl.

Chelan is the fourth planet of the F6V primary Eloina and the hive planet of the Hymenopterans. Eloina has a solar luminosity of 2.0, a solar mass of 1.2, and a surface temperature of 6,300K and a B-V color index rating of +4.4, yellow toward whitish in color. The other stars of the system are a K4V, Ruhnd, and Myrsia, an M2V spectral class star.

Ruhnd has a .35 solar luminosity and in a position aligned ellip
tical orbit around Eloina. Myrsia has a solar luminosity of .001 and is in a near circular orbit around Eloina for 34 years. Ruhnd's closest approach to Eloina is six light hours and the rarest at three light hours. But, six light hours due to the 34 degree difference in the inclination of their orbits around Eloina. The Hymenopteran survival system for their mass in the planet is compact enough to allow exploration at a technological level that would fail reaching stars as distant as even a few light years.

Chelan, with a diameter of 15,000km, has a lower average density than Earth's. This gives it a surface gravity of .82 Earth normal. Sea level atmospheric pressure is about 50% greater than Earth's. The planet has been modified by the presence of the largest Chelan moon having a diameter of only 1,700km. The thicker atmosphere and lower gravity of Chelan compared to Earth allows a lovely home for heavier flying creatures and plants to evolve. The height range for unmutated Hymenopteran flyers and floater plants is in the 15-20km range.

Tectonic activity on Chelan is rapid and intense. The low planetary density and small lunar gravity pull would have given a level of tectonic activity much lower than Earth's. However, the planet out in the Eloina system, has a diameter of 65,000km with a mass forty-one times that of Earth. Ulipa orbits at an average kilometer and with an 11% difference in its closest and farthest approach to Eloina. With a planet of almost half Chelan's mass but close to Chelan, (and occasional passage even closer) it's surprising that Chelan doesn't experience earthquakes as much more violent than the 9-11 Richter scale disasters that occur yearly. This recurring earthquake activity coupled with many active volcanic zones is, as would be expected, disruptive to Hymenopteran cultural and social development.

Mountainous, rough terrain would be even more common if it weren't for the rapid weathering rate of the thick, Chelan atmosphere and violent storms. The 22.53 hour Chelan rota
tional period coupled with a Chelan equatorial circumference 156 greater than Earth's yields a more rapid atmosphere despite the greater relative density. What would require 100 million years of tectonic weathering and activity on Earth, is finished in 10 million years on Chelan.

Oceans account for only 52% of Chelan's surface area. This leaves the moons almost covered in more raw land area on their home planet than man. A higher percentage of Chelan's landmass is covered in the flat areas is arable for major food staple strains of Virosa.

This then is the home of the Hymenopterans, the居家 warmer, more physically violent, and more supportive of evolving, air life-forms. Up to the time the game Chelian and Amytras began evolution among the Hymenopterans was nearly stagnant. There wasn't much in terms of evolution culturally or physically beyond the existence of Basics with some differentiation into worker and warrior types. All they had going for them was the upper living ability to manipulate very tiny masses telekinetically. The dawn of the Hymenopteran bio-genetic revolution from anyone's first fumbling attempts to alter DNA and RNA structures in fertilized eggs for survival was a miracle, but it proved more than enough to insures Hymenopterans a place on the galactic scale a millenium later.

The day of struggle had worn on long past noon. Overhead flights of gliding, stinging Plunges had re-crossed the battlefield many times in rolling air death dances. Half the harried 2Zek command was dead. Workers of both forces continued to stream on to the battlefield replacing the dead who'd failed the hive mothers. Most of the Virosas and corporals were still in combat, with each side able to muster less than half its initial force of warriors much as left to be won or lost.

Kkha's soldier bred mind suffered the melding mulls of his dead brothers in silent urgency. 2Zek meld was almost done this day where the outcome. Kkha and two brother Basics now pursued a group of enemy with Virosa without regard for the now enraged group pursuing a mixed gathering of Termagants, Low Renders and an in tact mandibles of 2Zek Gantuows. As they closed on the escaping workers and...
the precious Vlaros a few Plunges dropped in to kill the last of the Zlek Basics with the group. A frantic weaving and bobbing of armored limbs and abdomens insured, desperate and wild. When the dust of the small tumult cleared one Basic, four Plunges and Kkha's Snyder mount lay groaning and broken. Kkha's middle left appendage had been ripped from its socket. Slapping mud on the seeping ooze he mounted a Gantua.

The fleeing workers had gained a little time but not enough. The exhausted Zlek force charged among them with abandon, risking the death only workers can give when the harvest urge is on them. The Vlaros had to be stopped here or it would be too far for the Zlek workers to reach.

Soon, there was but a pile of fresh bodies and Vlaros stalks surrounded by the surviving Zlek warriors. A party of enemy Ternagants with a few Phlanxes drew up to ready an attack. Kkha ordered a force for defense with a detachment to the south as cover for the approach of some Zlek workers. The attack of the enemy drove home before the workers could arrive to move the food closer to the hive. Kkha waited until the last minute then sent one of the surviving Zlek Plunge groups down on enemy Basic Cognates as the battle joined. After some frantic killing and a Zlek Gantua counter charge, the battle was over. A few enemy dragged away, no commanders to control them. Kkha surveyed the battlefield, now hung with haze, from the back of the restless Gantua and saw that duty remanded him to guard the Vlaros he had. Works were soon among them lifting up huge loads to carry to the mothers. Checking the Zlek meld net, Kkha knew Zlek was done from this short day's war. Kkha whipped the minds near him to even more speed. The deaths gone would be more and if the Vlaros and bodies weren't removed quickly from this spot.

***

Hymenopterans seek and hoard food above all else. Food is the present constraint on hive expansion. With sufficient food, a hive could expand population at a 50% annual rate. The hive mothers want food for their young, so, the Basics get it for them. This is the whole rationale of Hymenopteran existence. As a game, Chitin I portrays the harvest war phase as it was in the early stages of the Hymenopteran bio-genetic revolution. The prime directive was still to harvest the Vlaros, this despite the startling advances in mutated workers and warriors of all kinds. Even as Basic cognates began to mutate smarter and more capable versions of themselves, obtaining as much Vlaros as possible with all speed was still the rule. The seasonal wars were rampant for nearly a hundred years after the development of the first genetically improved warrior. The wars only ended when the mothers of a single hive had established their sisters over the entire planet and all others were exterminated.

The Basic cognates are the sentients of the battlefield and have management. Possessed of telepathy and control, they direct the primitive minded warriors who might fail to control themselves if left unmanaged. Workers and flyers are a bit more intelligent than warrior types and don't need command control even though they do take direction from

Basics. Workers and Flyers have the ability to operate independently as required, though with less intelligence than if directed by Basics. Warriors without command control won't move far, act defensively, and are far less effective.

Advanced victory conditions of Chitin I reflect the food value of the hive members themselves. It is possible for a hive to win the bulk of a harvest yet lose so much protein through battle dead they suffer a net loss of food energy. Workers grab bodies as well as Vlaros when battle rages. Both are food for the hive. If Hymenopterans have religion or soul belief it would include fervent longing to end in their hive's own food processing vats to be ingested by their brothers and be again with the hive. It is perhaps the only religion for insects who are smart yet consider themselves as one with the whole community.

***

The long, exhausting day was finally drawing to a close. Basic, Workers, and Warriors had carted the last Vlaros stalk from the valley, and hauled the last body up the valley's slopes and skirmished with the enemy for the last few casualties. The fragmented Zlek remnants barely had time to make an evening camp outside the valley before sundown's cool crept into their bodies through their wounds.

Zlek had won a fair sized victory in terms of food value hauled from the battlefield. This year's harvest was poor, as predicted. But, most of the hive would be allowed life through the winter to a new spring. In the frequent small wars, that was as much as any could expect.

It mattered little that only thirty percent of the Zlek led force would return to the hive mothers. It mattered little that the Zlek command had been irrevocably smashed beyond rebuilding. What mattered was that the hive had food for the winter and would suffer no major catastrophic losses.

When the dawn of the next morning broke, Kkha didn't ride but was carried as food, dead, by a worker. His mind was still alive, but his body was shattered and rent. His glory had been in some last rear guard actions covering the movement of workers to the rear. It was combat of death, but they knew they would buy a bit of precious time for the workers, and a counter stroke. Kkha and the others gave that time and their lives in joy for the hive mothers larder.

Despite a still living brain, the Zlek meld survivors ignored Kkha. Those useless are already dead to those who can still give active service to the hive. Kkha knew himself dead and did no more than listen to the mental melding of his brothers on the horizontal corridors of the hive. He lived to sense the near forms of the hive mothers welcoming those survivors who worshiped them with the food of their victory.

He lived, for a moment, as his husk was dumped into the vats of the hive. As the vat's food acids lapped over him to melt his flesh, scales and skeleton into food stores his last thoughts were of serving.

ALL GLORY TO THE HIVE! ALL WORSHIP THE MOTHERS! May my flesh nourish you, my brothers, that I may love you through you to serve the hive. May your life serve the mothers as has mine. May you end with the love of final service as I.
STELLAR CONQUEST EXPANDED

by Robert C. Kirk

Many S-F gamers have probably entered the field with the purchase of either STELLAR CONQUEST or STARFORCE and gone on from there to purchase additional copies. This article is directed at those gamers who own or otherwise have access to both games and who appreciate the extra three-dimensional complexity the STARFORCE and the socio/economic competition which is the raison d'etre of STELLAR CONQUEST.

Basically, to give STELLAR CONQUEST this extra dimension of playability, we need to make certain adjustments to the STARFORCE map to enable us to play STELLAR CONQUEST on it. The STARFORCE map represents a roughly spherical volume of space containing 36,907 hexes in which 74 star systems are depicted. The SC map has 54 star systems contained in its 172 hexes. Obviously, on the STARFORCE map we have a far greater potential for expansion and exploitation. Another advantage is the semi-hidden movement—opponents will not know how far above or below the board other players' ships are.

Of course, stars are improperly marked for use in SC. The simplest way to correct this requires colored paper, double-stick Scotch tape, and a hole punch. Place a small strip of tape along the edge of a piece of appropriately colored paper and punch out a star. Since the tape sticks only on one side, you can then stick your star to the map. This will not interfere with the play of STARFORCE on the map and in any case, they will peel off easily.

Since there are only 74 stars on the map, SC with the 78 Star Cards, the cards can be used as they are. As there are five types of stars in SC and only four extra Star Cards, make 10 BLUE stars, 11 GREEN stars, 20 YELLOW stars, 12 ORANGE stars, and 21 RED stars. This will, in part in which all 74 stars are explored, use all the "G" cards and leave one each of the "B", "F", "K", and "M" cards. (The map is big enough to add even more stars in the empty hexes if this is your taste.)

Use your judgement as to where to place which type of star. They can be adjusted after a couple of games if you feel it's necessary.

As the galaxy is vast, the issue is weight; each system has the capacity to transfer up to three ships per turn through an artificial warp to a distance of 11 hexes. A ship can move up to its full movement allowance to get to the stargate and be shifted up-to-11 hexes in any direction on the same turn. If the player has Unlimited Ship Communications, the gate can reach any distance of 11 hexes, warp a ship in, and warp it out to another hex in the same turn. A stargate can be erected in a conquered system by the conquering player. In battle, a stargate has the offensive and defensive strength of 3 DN's and can fire at three separate targets per turn.

A GATELINK (GAL) consists of 2 or more SGA, located within 11 hexes of each other. The Ophiuchi planet having a maximum habitability level of 100 millions of population (i.e. TR-100). In addition, each player receives 25 Bonus Industrial Units to spend as desired. Each player starts the game with 4 Scout ships and 2 Escorts, all located in the home system's star hex and having a movement allowance of 3MA and a maximum ship range of 11 hexes for the Escorts.

Which systems are best used as home systems? In large part that depends on how you scattered your stars. The more you have (more than six are not recommended), and how soon you want to be able to reach the other players. For an interesting two player game 70 OPHIUCHI (at 2036/11) and SIGMA DRACONIS (at 2326/17) are recommended. These are the two most obvious stars on the board (being the home systems of the two alien races on STARFORCE). They are a good, but not impossible, distance apart (21 hexes). The Draconis player's mainproblem is getting down to where the action is, Sigma Draconis at 23 is one of the highest stars on the board. There are nine other star systems within an 11 hex range of the player, at 21, has the choice of colonizing upwards towards Draconis or downwards where he will be difficult to reach from any system within the 11 hex range.

With 3MA, both players have the potential to explore the stars before the First Production Year and thereby decide whether or not to send out colonies.

The STB, as the ultimate defensive weapon, converting a stargate into a device to focus the entire energy output of its sun into a solid beam of energy, which destroys any ships in that system, both friend and enemy.

When functioning as a STB, the SGA cannot shift any ships in that turn. Forces attacking an STB equipped system have one chance to destroy it, by attacking and destroying the stargate or by a player, upon learning the enemy fleet's composition, must state whether or not he is going to use the STB; if so, he would be transferring the SGA's normal offensive capability.

As the stargate is the ultimate defensive weapon, so is the NOVA BOMB (NVB) the ultimate offensive weapon. It is planted in a system's star by enemy forces which have destroyed all defending ships and the SGA. The defending player rolls two dice for each nova bomb, with the following results:

- 1 or 2 - the device is a dud
- 3 or 11 - instant nova
- 4, 6, 8, 10 - star explodes with
- 5, 7, 9 - star explodes within

To determine the year in which your star explodes use chits numbered 0 to 9 (for 10 years) or 0 to 19 (for twenty years) and draw one each game turn until the 0 is drawn, which will determine the nova. You can remove your population in DN's and ATK's at the rate of 3 in each SC turn. If the colony lasts until a production year, everyone can be removed in 0's. Any extra IV's and R/H's are lost.

INDUSTRIAL UNIT SCHEDULE

<table>
<thead>
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<th>IU cost/Item</th>
<th>1 IU cost/Item</th>
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<tbody>
<tr>
<td>80 SGA</td>
<td>55 NVB</td>
</tr>
<tr>
<td>20 PFS/year</td>
<td>40 STB</td>
</tr>
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</table>

Note that a PFA now costs 40 IU's and an additional 20 IU's each production year to maintain. If a year is skipped, it is still only 20 IU's to re-erect the PFS.

Although not included here, the production of inter-planetary ships as described in TSG #7 can be adapted now in this format.

Concerning ship movement: The counters need to be numbered so you can keep track of them. Even plotting moves for just the six ships...
you start with can get quite involved. Either use the counters provided with STARFORCE or number the fronts of your SC counters and ignore the ship designation printed on them. (If you number the SC counters on the back, you will effectively ruin them for normal use. Every time your opponent sees #13 coming down, he will know an ATk is on its way.) To keep track of which ship is which, where it is, and where it is headed, ordinary notebook paper can be used as per table #2.

*Meaning: Counter #2 represents an escort headed for 3018/+9. After the first turn it was at +7, after the second +8. It is only necessary to record the Zulu coordinates (the ship's location above or below the board) each turn as the ship's two dimensional location is marked on the board by the counter. Do not use counters for CT's. When establishing a new colony, record it on your record sheet as you normally would in the turn on which your CT's would otherwise arrive. This serves the purpose of keeping your colonies hidden until your opponent notices you building ships there. You cannot use that colony for purposes of extending ship range until the turn afteryour CT's would be expected to arrive.

Don't limit yourself to the instructions contained herein. These innovations of the basic STELLAR CONQUEST game are designed to add scope and realism to an already detailed game. It does make the game longer, but much more interesting.

<table>
<thead>
<tr>
<th>ship destination</th>
<th>1</th>
<th>2</th>
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<th>4</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>esc</td>
<td>3018/+9</td>
<td>+7</td>
<td>+8</td>
<td>+9</td>
<td>+9</td>
<td>+9</td>
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<td>+9</td>
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</table>
11.042 The players should note that this rule essentially means that an aircraft can move to any hex in a sixty-degree arc to its front.

11.043 At the end of an aircraft's movement, i.e., after it has expended all its movement points, it may change its facing by one hex junction. That is to say, it may change its facing from one hex junction to one of the two adjacent hex junctions. In the illustration below, the aircraft could change its facing from C to either A or B--or, for that matter, leave it at C.

11.05 Aircraft may ignore terrain. They may freely move through crater hexes and rubble hexes.

11.06 Aircraft may freely move through hexes containing other units and stack with other units. Note that this is an exception to rule 5.02, which states that no unit may end its movement in the same hex as another unit. Aircraft may end their movement stacked with other aircraft, and/or with ground units.

11.07 All aircraft must move as many hexes as they are able. Thus, an aircraft with (for instance) five movement points must move five hexes. Unlike ground units, aircraft are forced to move their full movement allowance every turn.

11.071 Fighters are given a movement allowance of 6; however, a fighter may move either 5 or 6 hexes, at its owning player's option. This is an exception to 11.07.

11.08 The only ground-based units that can attack aircraft (aside from AA units) are Howitzers and Ogre.

11.081 An Ogre may attack aircraft with its missiles and with its primary batteries. Secondary batteries and antipersonnel weapons, however, are ineffective against aircraft.

11.082 Howitzers have their attack strength halved when attacking aircraft.

11.09 If an aircraft is attacked and a "D" result on the Combat Results Table, the aircraft is forced to take evasive action. This means that the aircraft's counter is flipped back to the aircraft's owner's turn.

11.091 If an aircraft is attacked by an Ogre's missile or a Flying Fortress' air-to-air missile, it must automatically take evasive action, even if the missile attack results in a "NE" on the CRT.

11.10 It may occur that, because of a player's actions, an aircraft is forced to fly off the edge of the map at some point in the game. The players may, if they wish to keep the aircraft in the game, keep track of the aircraft's "imaginary position" off the edge of the map, keeping track of the number of hexes it is from the map edge. The aircraft must proceed to return to the map as quickly as possible.

12.0 BOMBERS

12.01 Bombers are aircraft designed to deliver a load of explosives or tactical nukes to a specific target. They do not carry weaponry other than their bombs.

12.02 Each bomber is considered to carry three bombloads, and may therefore make only three attacks in a single game. After a bomber has made its three attacks, it becomes useless, and is removed from the board.

12.03 Bombers release their bombloads while moving, not during the combat phase. A bomber is considered to have an attack strength of "6".

12.04 An aircraft may release as many of its bombloads in a single hex as its owning player desires. It may release bombloads in any pattern at any time during its movement.

12.05 After a bomber releases a bombload, it may continue moving. Attacks by bombers are resolved in the movement phase, so an aircraft that has released all its movement points may continue to move after releasing a bombload.

12.06 Bombs are considered to have no effect on aircraft; they may only affect ground units.

12.07 Bombloads have their attack strength halved (to "3") when infantry units are bombed, because infantry tends to be more dispersed than armor.

12.08 Although when all other units are bombed, a bombload's attack strength is treated as a single unit, as is the fire of normal units (see 6.09), a bombload may split up its attack strength when attacking an Ogre.

12.081 A bombload's attack strength may be split into as many as six parts. The way in which a bombload's strength is split need not be into equal divisions--thus, a bombload's strength could be split into one attack strength of "4", and one of "2". Each of the parts of a divided bombload's attack strength may attack a different part of an Ogre. Example: A bombload's attack strength is split into one attack with a strength of "2", and four at "1". The "2" is used to obtain a 1-1 attack on four successive anti-personnel batteries.

12.082 Although a bombload's attack strength may be divided, a single weapon system of an Ogre may only undergo one attack from a bombload. Thus, a bombload's attack strength cannot be divided so that, for instance, one weapon system underwent three 1-1 attacks. If any single weapon system of an Ogre is attacked, the attack strength points devoted to attacking that weapon system are totalled in a single attack.

13.0 FIGHTERS

13.01 Fighters are aircraft designed to intercept bombers, and to protect bombers from intercepting fighters. As well, they are capable of strafing ground units.

13.02 Unlike bombers, fighters make attacks in the normal manner. They do not carry bombloads, but simply attack enemy units. However, a fighter may only attack enemy units in its forward arc (see illustration). A fighter's forward arc is all those hexes that a fighter could move to if it were moving--i.e., a fighter's forward arc is bounded by the two hex rows that can be traced from the two hexes in front of a fighter.

13.021 A fighter's forward arc does include the hex it is in; thus, a fighter may attack aircraft in its hex.

13.03 Fighters may attack either aircraft or ground units. However, a fighter's attack strength is halved when it attacks a ground unit.

14.0 FLYING FORTRESSES

14.01 Flying Fortresses, also known as Continental Seige Aircraft or Ogre Magi, are the airborne equivalent of Ogres. There are two types of Flying Fortresses; CSA-10, and CSA-15.

14.02 Flying Fortresses have Movement Points in the same way that Ogres do. Each hex a Flying Fortress moves through forces it to expend one movement point. A Flying Fortress begins with a Movement Allowance of 4, and, in keeping with 11.07, must move four hexes each turn. When a Flying Fortress has expended a certain number of movement points, its movement allowance falls
to three, at which point it must move three hexes a turn. Note that a Flying Fortress' movement allowance falls one point for every 1/4th of its movement points it expends. Eventually, a Flying Fortress' movement allowance will fall to zero, at which point it is considered to come crashing to the ground, and is destroyed.

14.03 Flying Fortresses have two types of bombs; one type (listed on the Record sheet as Bombloads) are treated in exactly the same manner as bombers' bombloads. The other are antipersonnel bombs.

14.031 Antipersonnel bombloads are dropped in the same manner as regular bombloads. However, antipersonnel bombs have no effect on armor units; that is to say, they effect only infantry units.

14.04 Flying Fortresses are equipped with air-to-air missiles. These may only be used on enemy aircraft, and they have no effect on ground units.

14.05 Flying Fortresses are equipped with two types of guns--main and secondary. These fire in the same way fighters' guns do; i.e., they may only be fired in the forward arc of the Flying Fortress.

14.06 Flying Fortresses attack and are attacked in the same way as Ogres. That is, attacks on Flying Fortresses must be directed against specific weapons, and the Flying Fortress is not destroyed until it has lost all its movement points.

15.00 ANTI-AIRCRAFT UNITS

15.01 Anti-Aircraft units are ground-based units designed to destroy aircraft. Although they can be used against ground units as well as aircraft, they are less effective when attacking ground units.

15.02 There are two types of AA units--Light AA and Heavy AA. Their strengths are indicated below.

15.03 AA units have their attack strength halved when attacking ground units. They use their full attack strength only when attacking aircraft.

15.04 Note that a Light AA unit has a movement allowance of 1, while a Heavy AA unit is immobile.

**EXAMPLE OF FLYING FORTRESS RECORD SHEET:**

**CSA-15**

- 4 Bombloads (6/0;D3) 0 0 0 0
- 3 Air-to-Air Missiles (6/5;D3) 0 0 0
- 2 Main Guns (4/3;D4) 0 0
- 6 Secondary Guns (3/2;D3) 0 0 0 0 0 0
- 18 Antipersonnel Bombloads (1/0;D1)
  - Used only against infantry & CP's
  - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

**CSA-10**

- 2 Bombloads (6/0;D3) 0 0
- 1 Air-to-Air Missiles (6/5;D3) 0
- 1 Main Gun (4/3;D4) 0
- 4 Secondary Guns (3/2;D3) 0 0 0 0
- 12 Antipersonnel Bombloads (1/1;D1)
  - Used only against infantry & CP's
  - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

**48 Movement Points**

- 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

- (movement drops to M3)
- (movement drops to M2)
- (movement drops to M1)
- (movement drops to MO; CSA-10 destroyed)
PHIL-CON '77 will be on June 24-26 at Widener College, Chester, PA. Listed events include: tournaments, demonstrations, seminars, movies, awards, and prizes. Games listed are D&D, BOAT HILL, KINGMAKER SAMURAI, and others. For more information write: Jay Hadley, 918 Harry Street, Conshohocken, PA 19428.

CINCICON VII is to be held July 15-17, 1977, at the Junior Achievement Hall of Free Enterprise in Cincinnati, Ohio. Events include a wide range of games, abstracts, cyber sports and participatory literature. Examples: Kingmaker, Scrabble, Chesh, D & D, TV pong, and SUPERHERO 44. SUPREHERO 44 is a new game of superpowered crime powers beyond human abilities like Superman. Toolmasters (characters with technological specialities—super weapons or crazy inventions—like Iron Man), or Ubermensch (the "Ultra specialist", like Tarzan). For more information write: CINCICON VII, c/o Boardwalk, 1032 Delta Avenue, Cincinnati, Ohio 45208.

HOUSTON WARGAMING CON '77 will be held at Rice Hotel on August 12-14, 1977. Events include a dealers area, 12 tournaments and cash prizes. For more information, send SASE to: Southern Convention '77, 2601 Esther, Pasadena, TX 77502.

Acquisitions Department

The Avalon Hill Game Co. recently announced the acquisition of the entire game line of Aladdin Industries. The six games acquired include Tripples, Deluxe Tripples, Barrier, Perplexus, Ball and Totally.

The latest acquisition of Avalon games follows AH's purchase of the Sports Illustrated, 3-M, and Diplomacy game lines. Avalon Hill is pursuing a definite policy of growth through expansion. The wargame segment of the AH line has long been the most profitable and AH has contributed a disproportionate share of profits to the parent holding company. It will be a real challenge for AH to put life into lines that others were willing to sell off. Hopefully we won't see wargamers carrying the load of supporting the new AH acquisitions. It would seem unfair for the wargames to be the profit producing part of AH but not get all the expansion effort.

If you are interested in learning more about the L-5 Space Colonies to supply energy to Earth, contact: L-5 Society; 1620 N. Park Avenue; Tucson, AZ 85719. Christine Bunt (Westville Apts. B3-Al2; Farnsworth Drive; Slingerlands, NY 12159) suggests writing directly to your Congressman and to President Carter to make them aware of the advantages of the space colonies. She offers to answer questions (send SASE).

Reserve orders for FRANK KELLY FREAS; THE ART OF SCIENCE FICTION are being taken. The book, by the renowned science fiction illustrator, includes over 35 paintings in full color; over 75 additional sketches and illustrations; handwritten captions from Freas own notes; narrative text describing the artistic vision of Freas; introduction by Isaac Asimov; special deluxe binding, numbered and autographed, in gold-stamped slipcase, personalized on request. It is available (to be shipped by Sept. 9) for $29.95 (Virginia residents add 4% sales tax) from The Donner Co./Publishers; 251 West Bute Street; Norfolk, VA 23510.

THE SPACE GAMER has been nominated for the Charles Roberts Award for Best Semi-Professional Magazine, winner to be announced at Origins '77 held in New York City July 22, 23, and 24.

GenCon West '77, sponsored by Outpost Hobbies Inc., will be held at Villa Hotel; San Mateo, CA; September 3, 4, and 5. For more information, write P.O. Box 4042; Foster City, CA 94040 or call Thomas and Mary Jean Vaughn at (415) 573-6747 by June 30th.

TactiCon II will be held July 16 and 17 at Dunfey's Royal Coach Inn; 7000 Southwest Freeway; Houston, TX 77036. There will be tournaments, seminars, and films. For more information, write 915 Silber Rd.; #329; Houston, TX 77024 or call (713) 688-0531.

MichiCon VI Gamefest will be held June 3, 4, and 5 at Oakland University, Detroit. Planned by the Metro Detroit Gamers, it will feature Avalon Hill's Tom Shaw, Randy Reed, and Richard Hamblen; over 25 board-game tournaments, seminars, and more. For further information, call Al Slislinger (313) 839-3364 or write him at 19941 Joan; Detroit, MI 48205.
G.E.V.

by Jerry D. Bell

It was two hours before dark when the big show started in the north. On the horizon you could see the reflected fireballs and even a few stray Hiveloc round burning up at the end of their range. The sound of the battle didn't carry over the distance but you could feel the ground shocks through the suspension. I began to worry. The operations officer hadn't mentioned any projected offensives, which meant only that he didn't know of any. But the rumor mills hadn't any poop on any sort of dust up. Now the north was alive with micromakes and Hivelocs. Somebody had guessed wrong.

"Mateland!" I was sitting on the forward glacis of my buggy, catching some fresh air, when the north lit up. I hammered at the hatch over the driver with the butt of my side arm. "Mateland, heads up." He poked his hat out of the hatch, blinking at the light. I could feel the hover tick over under me. "Trouble Jake?"

"North."

He looked over that way, then turned back to me. "So?"

"I've got a feeling about that dust, tell the troop to prep their buggies for micks." I slid down and blew my nose clear. We'd gotten a dose of some Virus-IV about six months back that had left me with a constant cold.

"Copacetic Jake, but if it's a zilch you'll get a horselaugh." I slung my sidearms over my shoulder and walked towards some ruins to our left. I wanted to talk to the MI topkick who's lot were bedded down with us. "Prep them, tell the other troop they'd better get up too. I'll worry about the laughter later."

The ground was broken, dried up from the long summer and churned to a powder from us and the Micks. The MI had dug in between a smashed up church and three Mick heavy tanks that had brewed up when we took the place about a month ago. The top was standing out by the tank that had the three Micks melted into the armor. "What do you think, Sergeant?"

"Don't know, Captain." He was in his armor, towering over me by a half meter or so. He was half bone and his own long bones. "Heard anything?"

"Nothing. We're prepping the buggies though." I looked to the north again. A flash lit up half the sky. "Word to the wise I suppose, you need any small arms munitions?" He shook his head.

"We pick up any more armor?"

"We got eight hovers, six missile tanks and the orphan heavy. That's all Sector Command left us when BEECH-V started.

He turned and looked at me from under his visor. His armor was a dirty, faded green, scarred here and there with field repairs. He was the oldest man of his platoon, just as I was the old man of the Buggies. We'd see our twenty-first year soon, if we were lucky. "I wonder," he said, looking back to the north, "just how bad they want our MI? A roll of thunder, then a pressure wave passed over, plucking gently at my jumper.

"There's your answer!" I turned and doubled back to my hover. Mateland had the turbines hot and the hover buttoned down when I got back. I snaked through to the driver's cockpit and began stripping in. "Any dope come down yet?"

Mateland came on the line from the ECM station. "That wind was a ten-key nuke--brigade says that the Micks have penetrated our front."

I grunted, bottoming down my hatch, then keyed into the Command network for situation reports. According to the battlefield intelligences, the Micks had thrown about three battalions of armor into our MI, then gone to work on our main line of resistance. We were in for it. Things were "fluid", meaning things were coming unstuck in a very unfunny way. "The troop mounted yet?"

"Yeah, everybody's on line and hot. Some more data came over the brigade link. I fed it into Mateland's "MI drone reports an Ogre coming down the pike?"

"That's what brigade said, hope we don't see that one." I strapped my self into the chair, watching the readouts come alive. My mouth was dry and I could feel the sweat under my skin-tights. I let my reflexes take over, I activated the computers, fed power to the gun turrets and tested all the circuits. Everything was up. "We're on line Mateland, mase the old man that we are go. Tell the troop to lift on my dust."

"Got you."

I idled the vanes for a minute watching the digitals for hot spots of harmonics. I was right if throttle, rocking us clear of the mud flat we'd bedded in a week ago. Dust billowed as small rocks clanged off the skirts. I put her in a neutral turn and checked out the rest of the troop. Gordy and Rosco were clear and skidding off to the sides to clear fire lines. Rube was still rocking his craft clean. He was my worry, a new boy. He'd come in with the last ripple draft and I'd drawn him. New boys always worried me. They could be as deadly to a troop as the Micks.

"Lance to three, little more rev's."

"Roger Lance," Rube's hover broke clear. "Lifting."
"Roger that, take up threes." He dropped back a bit, covering the rear and ready to bounce over us if needed. The turn in time to see one of our GEVs come helling over the foothills to the north. I spun about and dropped to it's spraywashus riddled across the plains in front of me, then another buggy topped the ridge. It was a Mick by the turns. One bugle right under the main gun, point blank. The Mick flipped off the ridge like a bobcat. The Hiveloc round vaporized in the turbines. Six-kicks-a-second and the best armor will flow like wax. Then came over the hill and casually smoked the GEV with it's main gun.

"Son of a bitch!" I poured power to the throttle, dumping thrust aft to slam us up to one fifty knots. "Pucker up tight trooper." I cut into the Command link. "Troop B, Lance advancing. Request release." "Released Lance, form on Alpha." "Roger." I went to the Troop Link. "Lance to troop, form on Alpha, form my Roger. Our Hivelocs could make most normal armor, but not ogres. That's what we carried the nuke rounds for. "Jacked up drone?" Mateland had two scout drones up and ready. I thought about it for a second. "No that thing will have all sorts of ECM to scramble the drones. We'll just have to break close and eyeball it. Tell the major that we're going to see just how cherry it is.

"Okay." I heard him key into the command link. "Lance to troop...

I dropped the link and revved the hover until I could hear slipstream in the cockpit. We were knocking along at about two hundred knots, breaking clear of the pack that was converging on the Ogre. The thinnest sliver of thousand meters away and it filled the screens already, it had rolled over the remains of the buggies and was coming right at us at fifty knots. We closed, a meter off the deck, running full out and dipping from side to side. I dumped thrust down and we bounced ten meters into the air, skimming past the thing like a fly buzzing a rhino. It's guns snapped at us, but we were too close and far too fast to register. I dropped her down on the other side and skidded about to face the monster again.

It's cherry," Mateland had an odd tone to his voice.

"Well cherry it is-

"Selfobile cherry. Missiles, all it's guns. I didn't spot a single track out of place. It's cherry!"

"Judas!" I got on the command link to the CP. "Troop B, Lance. Ogre is a Mark Three, undamaged. Missile armed." I poured power to rejoin the rest of the squadron when the Ogre swerved towards the skirmish line. "What's that thing doing?" I asked OUT! The ogre fired on the line of GEVs, smashing away with all it's guns and missiles. Three fireballs simply fell apart under the guns. Another hoever staggered off and grounded, it's engine compartments shredded. "Missiles on hoovers!"

"It got four of them, Mateland whiskered into the mike. "Rosco's down but he might slope off if we can torch it.

"Hang on." I dumped every pound of thrust I had aft. The two surviving GEVs came slashing in, trying to draw fire from the crippled one. The Ogre didn't even nibble, it fired it's main battery again. The second hit them. Nothing was left but a ten meter crater.

"Lance to troop, form on me!" I led the hovers in. The missile tanks warned me they would salvo in about ninety seconds. I acknowledged and flashed power away at the main battery. Then the missiles landed, blanking out our screens. When they cleared, the main gun was only a burning sore in the side of the beast. Smoke billowed out of it and driblets of molten BPC armor spalled off the treads. The ogre lurched overrunning one of the missile tanks and scatttering some MI that had tried to get the treads.

"In there again, register on the secondaries." We came screaming in again, the secondaries were blasting away. I poured power on our missile tanks. We slashed through the muzzle blasts, pouring out fire into it's turrets. One of my sponsors lost it's liner and the rounds began to tumble as soon as they left the barrel. We just cleared the target when the missile tanks landed another salvo on the thing. When the fireballs dimmed, two of the secondaries were gone, bubbling in their sockets, but two of our missile tanks were brewed-up and a third was crippled. I pulled the GEVs clear, dropping into a gully about five hundred meters away.

"Pull that barrel, now!" I told my Gunnery. We tried to raise the CP. Mateland cut into the link before I could raise them. "Jake, I'm picking up one hell of a signal ogre came over the lip of the guly and darkened the sky."

"LIFT! LIFT AND SCATTER!" We took off, jumping the lip of the guly before the ogre had time to cut us off. One of the other GEVs didn't clear the lip in time. We heard his guns hammer at the treads then the ogre ground him into the dirt.

"Who's left, Mateland?"

"Number three, Jake."

I flipped on the link. "Leader to three."

"Go ahead leader."

"How's your ship?"

"Minor damage only, sir."

"Okay, stick tight." I dropped the link and laughed. It was my new hoy. The one I thought I'd lose the first time we ran into the Micks. "He's getting on me. I tried to de-cherrying, eh Mateland?"

"Yeah, at least we know how the buggies get their fine young fools.

"Whatever. Let's hit that son of a bitch again."

I boosted the power up to the redline max and chased the beast down. Bits and chunks of equipment flashed by, MI lay strewn about mixed with fragments of track and armor. I jinked the hover to one side to avoid the hulk of the Heavy tank, ground down to half it's volume.

"Going in Rube, on the secondaries." We flashed by again; the MI small arms bouncing off the BPC armor, tumbling in mad trajectories back into our path. Our own Hiveloc rounds were gouging half meter square chunks out of the turret. I got a flash of one MI clinging to a tread with a limpet bomb, then we were past and the missiles landed. The shock waves near us tumbled but the turret was dead.

"It was too late though. It was maybe five or six hundred meters from the CP. We hovered ten meters off the tracks, burning out our barrels with Hiveloc rounds. The MI threw themselves into the fires, ignoring both the ogre's AP guns and our fire to slash at the treads. But that machine just kept coming. "BUG-OUT, BUG-OUT. IT'S GOING TO OVERRUN THE CP!" Men came scrambling out of the CP diving into light hovers and ATVs. The half squad of MI on the roof emptied their missile packs at the treads and then bounced away. Then the ogre did a graceful turn on the CP. It had won, but before it could lurch fifteen meters away from the rubble of the CP, we smashed one of the bogy assemblies. It could no longer move. "Okay, MI disengage. Hunt for survivors. Armor close in. Strip that damned machine!" I leaned back in my chair.

Sunset brought darkness except for the molten-ogre glow and slender moon. With brigade CP gone, the entire sector was without a coordinator. If they hit us anytime soon, we'd crumble like a dirt clod in a rainstorm.

"Mateland, contact HQ. Tell them we're unmanageable. Tell them we just had a Waltz with an ogre and it stomped our tail. Tell them we got nothing left and we're evacuating right now. Don't take no for an answer."

I looked at the TO list. It was littered with KIAs and MIAs.

"Hell, I don't care what you tell them. We've had enough."
Introducing the world’s most respected view on games

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Computer games-by-mail are a fast-growing sector of the gaming industry. Flying Buffalo's STARWEB has been highly acclaimed, both in adventure fiction magazines and thus is growing like the proverbial dandelion.

STARWEB

a review

by Jay Reese

Computer games-by-mail are a fast-growing sector of the gaming industry. Flying Buffalo's STARWEB has been highly acclaimed, both in adventure fiction magazines and thus is growing like the proverbial dandelion.

STARWEB is a science fiction game of stars and star fleets. Players have a choice of six different identities: Apostles, Artifact Collectors, Berserkers, Empire Builders, Merchants, or Pirates.

Each identity has different objectives: The Apostle gets points for converting populations to its belief; the Artifact Collector gains points by owning artifacts found on various worlds; the Berserker gets points for killing human population; the Empire Builder gets points for controlling worlds; the Merchant gets points for unloading consumer goods on worlds; and the Pirate gets points for plundering worlds.

There are also ninety standard artifacts which give points to the different types of players (Example, Gold Sword, which both Merchant and Berserker can use). And there are special artifacts which give points to any player (Example, Treasure of Polar, which gives twenty points to its owner per turn).

The game is won by points. At the beginning of the game, players choose numbers between one thousand and ten thousand. These numbers are averaged, and the game is over when one player reaches the average number of points. The exact number, however, is kept secret until the end.

The game costs ten dollars to begin (which includes a two dollar deposit), good for five rounds. After that, rounds cost one dollar each.

The original directions were mimeographed in a manual which was hard to understand, so most original players like myself have had to play by trial and error. A second edition of the rules was printed, with a shiny cover and better artwork. It had many rules clarifications and examples which makes play much easier.

To add to the complexity, moves have to be written by the players in a very defined form for the computer. There is no provision for replay, so that if a player goesofs, he pays the consequences. An example of an order moving a fleet to a certain world would be F480 W505 W498. To attack an artifact to a fleet, the order is V507F411. To build seven ships to a planet, the order would be W711B7F480.

Results of each move come in a computer printout, which requires decoding. A partial example of one line would be W711 (505, 498) MASH (30, 1, 51, 100, 7/0/2, RMS 10, SHP=1, SP=2). Translated, this means that World 711 is adjacent to Worlds 505 and 498. World 711 belongs to player MASH in Industry 3, Raw Material Production, 51 Population, 100 Population Limit, and was owned twice. It has a stockpile of 10, has one 1 ship and 2 P ships defending it. There are further codes telling what type of ship it is. The fact is that many ships they have which fleets would go through, artifacts present, etc.

Each player is given a home world, (with industry, raw materials, and population) to start. He may build ships equal to the smallest number of the items. The ships may either be attached to fleets (also called 'Keys'), or may be '1 Ships' (defending a world's population), or 'P-Ships' (defending a world's population). In addition, each industry can build one more industry, or can increase the population limit by one.

A player may use his fleets exploring and claiming (or plundering over other fleets that claim the world) other players worlds. These worlds may also have certain artifacts which may or may not be valuable. A player who reaches worlds owned by other players, may either negotiate with them, or fight them, or both. A fleet may move up to three worlds per turn. Ships may also carry raw materials or artifacts.

The rules are rules for ambush, for battles between fleets or between fleets and worlds.
The basic rules pertain to movement and combat. MI movement is either walking or running. "Walking ahead" means moving one hex to the nearest hex (a cost of only one move-point). Combat is of two types—hijack (where a player is launching a missile that hits any hex on the board you want it to, affecting a circle of six hex radii. Each turn, one of these H-type combat is regular shoot-the-bastard type combat. Damage done in both types of combat range from 0 to 5. The former involves using the number of hexes distance between the attacker and target. As long as the MI can combine attack strength, which has the effect of lessening the range on the combat table.

All three scenarios are clumsy to set up and extremely simple to actually play. The first, "Squad Sweep", has the MI forces raiding a small town. Before starting, the skinny player has to locate on the blanket hex-sheet a total of 49 counters—21 buildings, 24 hexes, and 6 armored platoons. If any military is stationed inside a building, appropriate counters are stacked upon the building counter. They can also be stationed on the roofs and, yes, you stack them on top. The MI player automatically knows these positions.

The objective of the Terran player is to destroy 13 points worth of Skinny buildings. There are Class I buildings worth 3 points each, six Class II worth 2 points, and twelve Class I buildings worth a single point apiece. So far, this is fine. However, the ten Terrans have to each operate separately since the Skinny will lob one of those N-Tops at a group. To attack a building, you have to be adjacent to it with Skinny platoons all over the place—"buy" every building you take. Every MI lost cancels out the point value of at least one of the buildings. If the Skinny player will risk some buildings to be sure of getting the Terran commander with a nuke, the MI forces have little chance of meeting the victory conditions.

The second scenario is "Operation Royalty" in which the fearless MI drops into the Arachnid tunnels to capture/kill the queen and/or leaders. Since they're basically after information, the number they are able to capture or are forced to kill determines the degree of victory.

RIFT TROOPER is available from Dave Casciano Co., Attack International, 314 Edgely Avenue, Glenside, Pa. 19038 for $8.00. I would recommend you read or re-read STARSHIP TROOPERS before playing—you'll have a better idea of what is being simulated.
THE DEATHTRAP EQUALIZER DUNGEON
a review
by Steve Jackson

This is the second "solitaire dungeon" to be published by Flying Buffalo. Like its predecessor, Buffalo Castle, it is worth its price to any fantasy role-playing fan who doesn't have a steady supply of fellow-gamers.

In case you haven't run into the "solitaire dungeon" idea, it works like this: You want to go dungeon-adventuring, but you don't have a DungeonMaster. So you sit down with the solitaire dungeon and a set of applicable FRP rules (in this case, Tunnels and Trolls). Your character enters the dungeon, and you read what he/she encounters in the dungeon book. The character's options at that point are described. You choose one, turn to the appropriate numbered paragraph for that option, and read what happened to you. You may be rich; you may be dead; you may have more decisions to make. Fun.

The Deathtrap Equalizer Dungeon (hereinafter DED) is a step up from Buffalo Castle, which was only for first-level fighters. The DED can be played by any type of character, and magic (up to 5th level) is allowed, and handled by an ingenious if limited system. (Consider all the possible spells a magic-user MIGHT throw in a tight situation... only one character at a time may enter - no armies.)

DED is organized in a different way, too. Buffalo Castle was laid out like a regular dungeon, with lots of interconnecting rooms and passages. The DED is composed of 16 separate adventures which do not interconnect; you pick one at a time. Your DED host, Umslopagaas of the Shy People, takes you into an adventure, and (if you survive) back out. This is an interesting gimmick, and it obviously made a dungeon a lot easier to organize - 16 little flowcharts instead of one big one.

On the whole, the DED adventures are ingenious and a lot of fun. They are a touch subtle in places; you get a situation like "Behind one of these doors there are a million gold pieces; behind another door is a demon which will kill you and all your relatives; behind another door is a pizza. Choose one." I made that one up, but you get the idea. Fast rewards and sudden death sometimes hinge more on random chance than on the player's (or character's) cleverness. However, in all fairness, there are a number of situations where logic will help considerably. A dungeon needs a little of both.

DED is also highly sexist. There are two separate situations which offer a high probability of amorous adventure for the male characters. Nothing in it for the ladies, though.

The only other problem is the monsters. There's nothing in here that a mediocre fighter can't be sure of taking apart by himself - especially if he's got a halberd coated with dragon venom, or something like that. On the other hand, if you're limited to "straight" swords and no poison, you'll die in there.

Typos are death in a solitaire dungeon, and DED has fairly few; most of these are listed on an errata sheet. Liz Danforth's illustrations, as always, add a lot. The bigger ones (especially the picture of Umslopagaas) are excellent; some of the smaller ones were either done in haste or badly reproduced, but they still break up the pages.

On the whole, it's a lot of fun. Generally, if you blow it, kid, but the gods are kind. They hate to see a really good man drown. They turn you into a blind white fish. Close the book. It's all over for you.

One final note: I'm pleased to see that Flying Buffalo is planning to do a whole series of solitaire dungeons. After you run through one of these a few times, it can get old, but if lots of people are around, you can keep trading off. So it works out.

The Deathtrap Equalizer Dungeon is $3 from Flying Buffalo, P.O. Box 1467, Scottsdale, AZ 85252. To play it, you also need a copy of Tunnels and Trolls (also from Flying Buffalo).

WAR OF THE SKY GALLEONS
a review
by Steve List

WSG is one of a trio of games collectively called WARRIORS OF THE GREEN PLANET. This game deals with aerial warfare, the other two with land and psionic combat. A three-page "history in the rules explains the background for the trilogy.

"About 60 years from now, a radical tilt of the earth's axis occurs, leading to catastrophic geologic and climactic changes, and the obligatory end of civilization as we know it. One scrap of knowledge that survives, however, is the technique of inducing certain diamonds to self destruct, releasing laser light. These precious power gems become prized for both civil and military purposes. It is also discovered that if one uses laser light to fuse hydrogen, the resulting helium has 40 times the lifting power of natural helium." This makes the sky galleons possible (Presumably the vast energy released by the fusion isn't a bothersome waste product, as no mention is made of it!).

Rather than being airships of the usual pattern, gondolas hung under gas bags, these galleons have rigid double hulls of a super mache, with gas in the outer section, cargo in the inner, and crew space and weapons on a deck above the whole thing. In fact, the cover art shows a beautiful 19th century style barkentine under full sail with a pair of gun houses fore and aft suggestive of a Fletcher-class destroyer. In the foreground can be seen an apparently mastless vessel
with muzzle loading cannon in broadside batteries. Esthetics aside, this sort of construction leads to ships oddly suited for aerial warfare. The main batteries are mounted fore and aft and have upward and downward play, but the secondary batteries (of less range and power) fire only broadside with upward play. The main stings of these ships are in their ends, and in that respect they resemble galleys more than galleons. They should fight in line abreast rather than line ahead, and the use of boarding as a tactic reinforges this. The fields of fire of the main and secondary batteries do not overlap, but each ship counter occupies two hexes and so may lie in more than one field. Ships can also damage each other by dropping rock ballast on a target below them. There is another tactical idiosyncrasy, you contend with; ships must always move their full Movement Allowance. Since the four types in the game have three different MAs among them, maintaining heterogeneous formations is most inimicable.

In play, the game bears some resemblance to WOODEN SHIPS & IRON MEN, with the third spatial dimension added. There is nine possible altitudes from ground level up, and forests and hills can be real hazards to low-flying ships. Play is sequential, with each player turn made up of 6 phases: Altitude decision, Grapping, Movement, Grappling, Combat and Boarding, in that order. Ships take only Weapons and Buoyancy hits - two of the former knock out cannon, with further ones being treated as Buoyancy hits. These can be absorbed up to a point, at which the ship goes into a controlled descent or it crashes. There are also a variety of critical hits ranging from loss of fire-power to immediate destruction.

Four scenarios are given, but writing your own is easy to do. The game itself is easy to learn and plays quickly. For those who can swallow the "science" fiction background and overlook the absurd engineering it postulates, this can be a highly enjoyable game. In terms of physical and design quality, it is a par with other Fact and Fantasy products. One unusual aspect may turn some people off. The bulk of the game counters are mounted and die cut, but the ships themselves are printed on adhesive backed paper, and must be mounted and cut by hand.

WAR OF THE SKY GALLEONS is available from Fact & Fantasy Games, P.O. Box 1472, Maryland Hts., Mo. 63043 for $5.50.

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OGRE

a review

by Robert C. Kirk

Metagaming Concept's first MicroGame, OGRE, designed by Steve Jackson, is everything it is advertised to be. It's a lot of game in a little package. In fact, I was somewhat surprised when my copy arrived -- the entire game comes in a 4 by 7 inch package. Thus, it is advertised as being small in format...

Anyway, the heavy paper map folds out to 8 by 14 inches and the sixteen page rulebooklets not only gives basic and advanced game rules, but fits in several optimal rules as well. Miniaturized versions of the excellent graphics by Winchell Chung which illustrate the text are printed on the counters which come in three shades (white, light grey, and dark grey) to facilitate multi-player play. They depict the various armored units and, of course, the Ogre.

The rules both read and play well. Read through them, play the basic game once with the booklets for reference, and you will have learned a new game. The only record sheets you need are easily whipped up in about 10 seconds on a piece of notepaper. They serve to record the progressive destruction of the Ogre.

When setting up the game, the non-Ogre player locates his command post, missile cannons, armored tanks, and infantry within the rubble-area of the map. The rubble serves to hinder movement of anything less than an Ogre. The Ogre enters the map from the river at the far end. From this point, a description of the play reads like Steven Jackson's featured article in TSG #9. Notes on the Ogre. Combat results are designed so that the Ogre is blown apart a piece at a time. On the other hand, anything an Ogre hits, if not totally demolished, is at least temporarily out of action.

The Ogre's sole objective is to survive, the Ogre must be immobilized while it is still out of range--a weaponless Ogre can ram and crush it; it is an Omebile Ogre can blow it to bits. If the defending general becomes too concerned about destroying the Ogre's arms, the brute will stoically drive right through the post. This is invariably fatal to generals, but doesn't even bruise Ogre.

Strategy is, of course, dependent on the players' skill and the composition and placement of forces. In general, the GEV's should not be overestimated--they're fast, yes, but the Ogre is faster and has a longer range, as do Howitzers. If missiles are wasted at the edges of the board, you'll lose some tanks until the Ogre runs out of missiles, but unless you can slow him down so that your own tanks can keep up, the Ogre can drive straight for the command post, ignoring anything in its way.

If you're the Ogre, keep as far away from those Howitzers as you can. Don't waste missiles on them, use them on the enemy missile tanks. They have a range greater than your guns, and unlike the howitzers, you can fire on the howitzers. Missiles are probably your greatest weapon--as often as convenient. If this doesn't kill the enemy tanks right off, it at least knocks them out for the next turn and makes them cheaper to kill.

OGRE is attractive, easy to learn, inexpensive, and fun to play. What more can a gamer ask? OGRE is available from Metagaming Concepts for $2.50 plus CBO subscription and $2.95 for others.

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BATTLE FOR ANDROMEDA

a review

by Steve Jackson

TO: CB0
FROM: SJ
SUBJECT: My review of "Battle For Andromeda"

UGH.

TO: SJ
FROM: CB0
SUBJECT: The review you were supposed to write.

What do you mean, "UGH"?
What kind of a review is that?

TO: CB0
FROM: SJ
SUBJECT: BFA REVIEW

It's a crisp, concise, accurate, to-the-point review, that's what kind of a review it is. I repeat: UGH.

TO: SJ
FROM: CB0
SUBJECT: That review.

I gather what you are trying to say is that "Battle for Andromeda" is a lousy game. If that's the case,
These models of the starship Enterprise are fighting with a little Buck Rogers ship and two WWII floating mines - one with a double fuselage and the other with pterodactyl wings. (Well, that's what they LOOK like.) Inside, the type is little, tiny, and blurred. But that wouldn't be so bad if the rules made sense, which they don't.

Here I have to admit that I haven't actually PLAYED this game. I doubt anybody anywhere has ever played it. I don't think it's possible. I've spent too much time already on this rulebook, and I sure wouldn't start to play, even if I had a set of opponents who understood.

These rules are totally lacking in organization. There is no table of contents and no evident logical order - and the book is 43 PAGES. In TINY type on 8 1/2 x 11 sheets. Imagine leafing through THAT to find one small rule. And, when you FIND the rule, you won't understand it, because the writing is truly god-awful. Misses rules, examples, and pseudo-science explanations in long, rambling, disorganized sentences. It's the next thing to incomprehensible. I quote: "One quality that redeems the DLC and DMC type ships and gives them a purpose in being is..."

Another rule states that not only do they have the multiplicative value against the more numerous DD craft, but they can attack any type of craft in hexes adjacent to them, but just in the hex they occupy." That is an AVERAGE sentence. What do you suppose it means?

Even if the rules were written so that you could understand them, I doubt very many people would want to play this. Much too long and complicated. As closely as I can make out, each of a player's major ships or bases (maybe a total of 15) has to choose, each turn, from 23 different "combat options", each of which is a different balance of power allocation to about 10 different functions. Of course, when ships take damage, they have life points, but the reason for that is back, up to a point. Et cetera.

The movement rules are equally doggeries. To add to the confusion, the board is stated to have 13 levels, of which the one we see is evidently the middle one. But the only way to tell what level a counter is on is to have it written down! I could go on like this for pages, but I won't. Instead, a hypo-

thetical game:
SATURDAY: The players get together and set up for play.
SUNDAY: The first player makes his move. All players then spend three hours recording various factors on pieces of scratch paper.
MONDAY: The second player wishes to initiate combat. However, a minor rule dispute requires two hours to clear up. In the process, it is discovered that three of the players have set up wrong.
TUESDAY: The first player tries again to initiate combat. Four hours of record-keeping later, he is through. At this point, one of the other players notices a rule that gives all players simultaneous movement. They consider starting over, but decide to go out and get drunk instead.

You see why I just wanted to say "Ugh"? This game is totally unplayable. It is a disaster. If I wrote an honest review of it, people would think I had it in for the designer (whoever that is). No one should buy this thing. It is a perfect example of how NOT to design a game. Someone evidently labored many months, and all they have is a complicated, self-contradictory, unplayable mess. I reread this, and it really sounds vicious - but this "game" is awful. I pity anyone who puts down good money for it.

TO: SJ
FROM: CBO
SUBJECT: Your Review

I see your point. Running a review like that would be pretty rough. On the other hand, don't people deserve to know when a game that has had a lot of hype is so totally bad that they'll never be able to play it?

TO: CBO
FROM: SJ
SUBJECT: Stuff

Yeah - maybe. One thing, though - are your short of space for material for the next issue? I have to think that my one-word review would give you problems.

AFTER THE HOLOCAUST
a review
by Norman S. Howe

The date is 2001 A.D. The world still survives, 20 years after the Third World War, a nuclear holocaust. Parts of the United States have begun to recover, under the direction of the Bank of America in the West, the Bell Telephone Company in the East, the Church of the Chosen Few in the Midwest, and various military groups in the Southwest. Each wishes to be solely responsible for rebuilding the U. S., and is willing to fight the other groups for the privilege...

This colorful scenario is merely a clever ruse conjured by Redmond Simonson, the designer of AFTER THE HOLOCAUST, SFI's latest "Power Politics" game. This game is really about Macro-Economics, Regional Development, and other occult subjects. The post-war fantasy trappings are in-

TO: SJ
FROM: CBO
SUBJECT: review

Oh, don't worry. I'll think of some way to fill the space.

TO: HMT
FROM: CBO
SUBJECT: Steve's "Battle For Andromeda" Review

Well, it worked. I got three pages out of him. He really put it down. That must be one TERRIBLE game.

TO: SJ
FROM: CBO
SUBJECT: Your Review

I see your point. Running a review like that would be pretty rough. On the other hand, don't people deserve to know when a game that has had a lot of hype is so totally bad that they'll never be able to play it?
SWORDS & SPELLS

A review

by Robert R. Taylor

Swords and Spells is, as the subtitle indicates, a set of rules for large scale miniatures battles based on the game DUNGEONS AND DRAGONS.

Basically, S&S is a very elaborate and expanded updating of the CHAINMAIL rules. S&S is extremely well done. The layout is excellent, the artwork is good and appropriate, and the rules are superb. They are written in a clear, easy style that allows for quick assimilation.

The rules are particularly strong in one of the most difficult areas of fantasy miniatures - magic. The spell casting and spell chart make up the magic rules. The spell casting and spell chart are very simple and straightforward. Also, the sample game in the appendix gives a number of examples of magic, and this helps in further clarifying this often nebulous area of fantasy wargaming.

The other rules are equally logical and concise, and make S&S a highly recommended buy for someone just getting interested in miniatures wargaming. Of course, to use S&S you must already have a copy of D&D and all the supplements.

Although the author (Gary Gygax) obviously spent a great deal of time and effort on these rules, especially the magic section, some concessions were made to allow for a more streamlined approach to miniatures. This reviewer found S&S to have a nice balance between complexity and playability. The staff of TSR should be congratulated for another fine piece of work.

SWORDS AND SPELLS is available for $5 from TSR Hobbies, Inc., POB 756, Lake Geneva, WI 53147, or from Metagaming.
DEAR EDITOR,

I borrowed a copy of Godfire from a friend, and was planning to review it, but changed my mind. I didn't cut out the counters, and I don't have the board. It's a game without playing it. Hence, this letter:

Godfire brought tears of pain to my eyes. The ideas are present, and the artwork is lovely, but I feel that the game is a white elephant which will be very difficult to play. As you predicted, it is a physically large game, in fact, too large. If the full components are laid out for play, a complete pool table or table tennis table is needed for comfort. The scenarios using only one of the large spaces.

Why is so much space needed? You were trying to save the players from doing paperwork. By using regular hexes and a written altitude record, the map could have been reduced to 2' square. I have less quarrel with the system sheets, but these are only used to effect in the Advanced Game.

This leads to my second complaint - the physical components for the Advanced Game seem almost an afterthought. The Gigabuck counters are too thin; they will be mutilated and torn as they are moved from cardboard; as presented, they will be difficult to lift from a flat surface. You have not provided indicators for the counters; you have this is merely an annoyance. A player may be expected to provide dice, paper, and pencils, but you should not have to make counters from nothing a practice, I fear, which even SPI uses on occasion, especially in its smaller games. I think it's time to move GBs through space unescorted.

Your memories may be good, but mine is poor. I do not see a need for additional indicators to the GBs which GBs belonged to which players. I cannot comment on the Advanced Game, except that it seems a quantum leap beyond the Basic Game; a leap some players may not be able to make. I think that some of the economics should have been incorporated in the Basic Game.

The final problem that bothered me was its technological premise of the game mechanics. Sublight travel and instant communication is feasible to me. The combat system is impossible, however. This leads with that can attack an enemy 2-1 light years distant, who can travel at the speed of light? Missiles launched towards the location of the target would be in vain. The "technological breakthrough" allowing 6 cells movement per turn is unbelievable. A faster-than-light drive should allow much faster travel; perhaps you were trying to prevent too devastating an advantage.

Norman S. Howe
Winnipeg, Manitoba
Canada

I apologize to the readers of my article TANK: Present-Future-Ogre (TSG10).

In the first case I stated that the Cruise Missile's TERRAIN Contour Matching guidance system used visual recognition, only, for an altitude of 

I misinterpreted a somewhat vaguely worded article. A more recent article described the guidance as a combination of internal (magnetic compass, gyro-compass, and computer memory) and a system that compares the actual altitude changes of the terrain below the missile, with stored memory of altitude changes for a much larger area along the missile's course. It checks altitude changes against a computer memory topographical map. Another variation on the guidance, which is under development, would use electromagnetics anomalies in the Earth's magnetic field along the course instead of maps.

Both of these systems would be useful in a cybernetic tanks guidance, it is not the visual guidance system I meant to mention.

In the second case the sentence "With a one kiloton nuke, detonation, infantry in the open are vulnerable only at 300 meters or less." should have read, "With a one kiloton nuke, detonation, infantry in the open are vulnerable out to 1,400 meters, but tank crewmen are vulnerable only at

300 meters."

For these errors I again apologize to the readers of TSG.

Charles R. Bowles
Colo. Sprgs., Colo.

For TSG10, Shyanne Gad's "SC Tournament at WASTE, what will will the population increments do if they spend all their IQ points on CTR's to shut the back off? The GM is allowed (to a degree) once or twice, planting "minimal colonies" of 4M/4I/U2 to hold "critical strategic assets" usually MT worlds, to extend my radius-of-operation. The "pure" CTR plan strikes me as risky, since if your enemy's radius onto your industrial colony with any sort of adequate expenditure force you might as well resign; cut it as fine as you like, but some of the GS's should be diverted to MB's and EGC's before another player can reach it. Finally, in the Crucible's "is it legal for a player to turn off one of his own colonies?"

Chris Chyba's "Planetary Probabilities" and Chet Edwards' "Alien Intelligences" are a pair of 7's.

The first, a good study of one of the many "workings of SC", could have used a bit more work, dealing with chances of finding a system with any habitable planet, but even so it was much more than in "Tank", then, I'm something of a mathematician, so I could be prejudiced. The other article is proof that the basic SC game may be endlessly adapted and altered, each variant presenting new challenges and play possibilities.

Mimachi Chung's ATK layout should be as a rule. Now that he's done the warships of SC, and depictions of the CT and SCT, I trust he will also design installations and industrial facilities, if only for the fun of it.

Charles Bowles's TANK and Steve Coles "Duel" get 6's from me, the first as a nice "off-the-cuff" speculation on the possible future of armament, the latter for being a short, tidy look at the role of the ORGE from the point of view of the "bloody infantry". I'll still be the only arm of the military that can occupy and hold ground. I'll also give Steve Jackson a 6 for his workmanlike adaptation of 6-sided dice to the use of "exotic" probabilities.

I tend to gauge reviews as "average" at the best of times, so Robert Taylor and Steve Jackson get a brace of 5's for "Metamorphosis Alpha", unless they are muddled out by my presentation, I found his presentation less than adequate—I'm still not certain in which milieu it is set—and the ending a bit too much ex machina. The overall art, as usual, defies a quantified qualification.

Likewise, I shan't pass judgment on the other features. Being news, reviews of books, ratings, ads and "plugs", they are as they should be, "discreet."

Where We're (You're) Going? I read them, and find them interesting, but I scarcely subject them to a critical appraisal.

The issue overall gets a 7.5 in my judgment. And you might well ask about the late H. Beam Piper wrote a number of military and military-oriented SF yarns—SPACE, VIKING, LANDS OF THE LITHOPS, "Ministry of Disturbance"—as well as the classic LITTLE FUZZY and its sequel, THE OTHER HUMAN RACE.

C. Griffin Mitchell, III
Merritt Island, Florida
The only thing I don't like about Ogre is the fact that it is difficult to distinguish between the light gray and dark gray counters.

After playing several games of it, my friends and I began thinking of some optional rules that might help to make it more realistic. Here are some of them:

(1) (to be used in conjunction with mines) When a G.E.V. crosses a mined hex, don't roll to see if it activated the mine because they travel mostly above the ground on a cushion of air.

(2) Exploding Power Plants - When an Ogre rams another Ogre, roll one die. If the number rolled is greater than that the power plant in one or both of the Ogres exploded because of the shock. The resulting explosion has the same effect as the one caused by an Ogre self-destructing. This rule should only be used if the combined movement factors exceeded by the two Ogres is greater than or equal to 5. In other words, if one Ogre moved 3 in its last movement phase and the ramming Ogre's movement phase, then roll the die (3+2=5). However, if both Ogres moved only 2, then don't roll. This rule came to mind as I read "Duel" in the number 10 TSG.

Another thing I've noticed is that when two people are playing an Ogre vs. Ogre game, the guy who gets in the first good shot or shots will usually win. This can be solved by using a simultaneous movement and combat system. Both players simply record the number of the hex they intend to move into. When both players have done this, move the Ogres into those hexes. If they aren't within range of each other yet, repeat the procedure. Once the Ogres are within range of each other, each player should fire all his weapons that are within range of the enemy Ogre and the damage should be marked off on a separate piece of paper (not the Ogre's record sheet). The other player should then do the same thing. After all combat between the Ogres is completed for that turn, the damage done to each Ogre should then be marked off on the Ogre record sheet. Now the players go back to the movement phase and start the next turn. In other words, when one Ogre fires at another, the damage done isn't recorded on the Ogre record sheet.

This reflects the idea that both Ogres are going to engage every range of each other and fire their weapons at each other at about the same time. They aren't going to just sit there waiting for their turn to move and fire.

Overall, I feel that Ogre is a really great game and I think the microgames are a fantastic idea.

Vernon Thorp
Burnsville, Minn.

My congratulations to Steve Jackson on the fine little game Ogre. More play for the money but it hasn't saved me any time. I just play more games in the same time.

The one of the first things that I noticed, though, was the uselessness of heavy tanks. With a range of only two hexes they are sitting ducks for secondary batteries, and they make nice doormats for an Ogre to wipe its treads. Far more protected for the same battery attack strength allocation are two G.E.V.s, with a combined defense of 4 compared to 3, and invulnerability once missiles and main batteries are gone. One way to save Heavy Tanks some work would be to increase their range to 3. G.E.V.s still look better but it will make tanks more competitive.

Science Fiction wargames seem to be perfectly suited for the Microgame format. One of the problems our society faces is that modern weapons destroy an awful lot in very little time, a problem in maintaining peace, but ideal for carnage loving gamers.

Tracy Harms
Tacoma, Wa.

Our group has been playing Ogre for a while now, and we've hit upon an idea that other gamers might like to know. We don't how it would work out, since we've not had the opportunity to try it, but it just might work out very well.

Instead of using the planetary attack step in SC, we decided to campaign a version of that and use the Ogre as well. Each dreadnaught could carry 5 OGRES, each Attack 3, and each Escort could carry one. This would add realism to the planetary attack step than simply burning millions of colonists, which is unrealistic in the first place.

Patrick Brennan
East Hartford, Ct.

$2.95!

SCIENCE FICTION AND FANTASY

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Already recognized as a classic of science-fiction gaming, Stellar Conquest is a game of exploration, production, and combat. As the players fight for control of a globular cluster, victory will go to the one who makes best use of the available resources to outbuild and outguns his (or her) rivals.

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For 2, 3, or 4 players; playing time 3 to 5 hours.

Designed by Howard Thompson; booklet cover by Kelly Freas. Stellar Conquest sells for $8 for subscribers to Metagaming's magazine, The Space Gamer.

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Designed by Ken St. Andre; edited by Steve Jackson; illustrated by Liz Danforth.

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Godsfire can be played solitaire or by 2 to 15 players; counters are supplied for 6. Playing time varies from two hours to all day, depending on the scenario chosen.

Designed by Lynn Willis; edited by Steve Jackson; illustrated by Eldadon Elchoh. Godsfire sells for $15. TSG subscriber price $12.50.

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THE SPACE GAME...THE

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